

## TOKIN PRODUCTS

# Compliance to RoHS Directive

List of compliant products and restriction status of prohibited substances



**Vol.13**

●The RoHS compliance means that we judge from Directive 2015/863/EU Amending 2011/65/EU that the products do not exceed maximum permissible levels for lead, cadmium, mercury, hexavalent chromium, PBB, PBDE, DEHP, BBP, DBP and DIBP except for regulated exemption use.  
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\*RoHS: RoHS (2015/863/EU+2011/65/EU) directive

## Proadlizer

| Product Family | Product Type | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status   | Remarks |
|----------------|--------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|---------------------|---------|
|                |              |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                     |         |
| Chip Type/SMD  |              | PF/A        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Production stoppage |         |
|                |              | PF/B        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Production stoppage |         |

## Tantalum Capacitor

| Product Family                             | Product Type                                              | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status              | Remarks                      |
|--------------------------------------------|-----------------------------------------------------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|--------------------------------|------------------------------|
|                                            |                                                           |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                                |                              |
| Polymer Tantalum Capacitor<br>NeoCapacitor | Chip type/SMD Polymer/Low ESR                             | PS/G        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
|                                            | Chip type/SMD Polymer/Standard                            | PS/L        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
|                                            |                                                           | T52X/530    | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          | T520, T521, T523             |
|                                            |                                                           | PS/K        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not recommended for new design | Compatible with T52X series  |
|                                            | Chip type/SMD Polymer/High temperature                    | PS/H        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
|                                            | Chip type/SMD Polymer/CB terminal                         | G/PS        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
|                                            | Chip type/SMD Polymer/face down terminal                  | F/PS        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
|                                            | Chip type/SMD Polymer/Automotive grade                    | PS/U        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
|                                            |                                                           | T59X        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          | T591, T598, T599             |
|                                            | Chip type/SMD Polymer/Automotive grade/face down terminal | F/PU        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
| Tantalum Capacitor                         | Chip type/SMD Polymer/High reliability                    | T540/T541   | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |                              |
|                                            | Chip type/SMD With fuse                                   | SV/F        | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |
|                                            |                                                           | SV/H        | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |
|                                            |                                                           | SV/S        | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |
|                                            |                                                           |             | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-NO     | Production stoppage            | Compatible with T49X series  |
|                                            |                                                           |             | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |
|                                            |                                                           |             | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |
|                                            |                                                           | E/SV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Production stoppage            |                              |
|                                            |                                                           | SV/K        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not recommended for new design |                              |
|                                            |                                                           | T49x        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          | T490, T491, T494, T495, T498 |
|                                            | Chip type/SMD CB terminal                                 | G/SV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Production stoppage            |                              |
|                                            | Chip type/SMD Face down terminal                          | F/SV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Production stoppage            |                              |
|                                            | Chip type/SMD Low ESR                                     | SV/Z        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Production stoppage            | Compatible with T49X series  |
|                                            | Resin coated exterior type/insert                         | DN          | Y                    | Y                | N              | Y              | Y               | Y                | Y               | N                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |
|                                            |                                                           | DH/R        | Y                    | Y                | N              | Y              | Y               | Y                | Y               | N                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |
|                                            | With metal case/insert                                    | H           | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-NO     | Production stoppage            |                              |

## Supercapacitor

| Product Family    | Product Type     | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|-------------------|------------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                   |                  |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| SMD type          | FC****ZFTBR**    | FC          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                   | FCS****ZFTBR**   | FCS         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                   | FCR****ZFTBR**   | FCR         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| Resin-molded type | FM****ZF(TP**)   | FM          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                   | Automotive Grade | FM(FMD)     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                   | Automotive Grade | FM(FMU)     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

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| Product Family         | Product Type     | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status              | Remarks |
|------------------------|------------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|--------------------------------|---------|
|                        |                  |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                                |         |
| Metal-can type         | FA*****ZF        | FA          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
|                        | FE*****ZF        | FE          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
|                        | FG(*)*****ZF     | FG          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
|                        | FR*****ZF        | FR          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
|                        | FS*****ZF        | FS          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
|                        | FT*****ZF        | FT          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
|                        | FY*****ZF        | FY          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
|                        | Automotive Grade | FUOH        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production          |         |
| Large capacitance type | HVZ*****NF       | HVZ         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not recommended for new design |         |

## Shape Memory Alloys

| Product Family         | Product Type | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|------------------------|--------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                        |              |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Nickel titanium alloys | (Memoalloy®) | MAT         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                        |              | MUC         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

## Permanent Magnets

| Product Family   | Product Type | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|------------------|--------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                  |              |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Sm-Co magnets    | (Lanthanet®) | LM          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| Fe-Cr-Co magnets |              | KX-1        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                  |              | KX-4        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                  |              | K-5         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

## Ferrite Cores

| Product Family | Product Type | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|--------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |              |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Ferrite Cores  | High-B       | BH1         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | BH2         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | BH3         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | BH5         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | BH7         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | B40         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | BH1T        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | High-μ       | 5H          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | 7H          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | 10H         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | 12H         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | S15H        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

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## Flex suppressor®

| Product Family            | Product Type                                           | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|---------------------------|--------------------------------------------------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                           |                                                        |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| For Noise suppression     | High Permeability type                                 | EFX         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                           |                                                        | EFX6        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | EFW         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | FX2         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                           |                                                        | FX5         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | FW5         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           | UL94 V-0<br>Flame Retardant type                       | EFF         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                           |                                                        | FF1         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | EFF4        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | EFA         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | EFH         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                           | GHz band High<br>Performance type                      | EFG         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                           |                                                        | FG1         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | FG2         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | EFG2        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | EFG3        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           | SHF band type                                          | EFS         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | FS          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| For Cable EMI Suppression | Tape type                                              | ESTX        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | ESTV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| For RFID                  | High Magnetic Permeability<br>& Low Magnetic Loss type | RM4A        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                           |                                                        | M4          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

## Power Inductors

| Product Family | Product Type  | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|---------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |               |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| SMD type       | Shielded Type | SN-S3M      | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |         |
|                |               | H.DI        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                | Open Type     | SSB14       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | SSB15       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | SSB44       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | SSB64       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
| DIP type       | Shielded Type | SBPSC       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | SBC1        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Open Type     | SBC2        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | SBC3        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | SBC4        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | SBC6        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | SBC7        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | SBC8        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | SBC9        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | SBCP        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

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# Compliance to RoHS Directive

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RoHS Status RoHS-PRC : Compliant without Exemptions, RoHS-EU : Compliant with Exemptions, RoHS-NO : NOT Compliant

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| Product Family | Product Type  | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|---------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |               |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| DIP type       | Troidal       | OH          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | SHP         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
| SMD type       | Shielded Type | MPC         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | MPCG        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | MPCH        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | MPCV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | MPLC        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | MPLCG       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | MPLCH       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | MPLCV       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | MPX         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | MPXV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | MPEV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | MPGV        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |               | C.PI        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |               | TPI         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

## Device for HD-PLC

| Product Family | Product Type | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|--------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |              |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| DIP type       | PLT series   | PLT-01      | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | PLT-02      | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

## EMI Core

| Product Family | Product Type                       | Series Name  | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|------------------------------------|--------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |                                    |              | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Ring type      | Bare, Coated, with Case            | ESD-R        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | with Snail-Shaped case             | ESD-R-B      | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | for a Low Frequency Noise (150kHz) | ESD-R-SR     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | with High Heat Resistance          | ESD-R-H      | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Nanocrystal cores                  | ESD-R-H-NC23 | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Nanocrystal cores (Base Type)      | ESD-R-NC-BT  | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| Snap-on type   | for Round Cables                   | ESD-SR       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                    | ESD-SR-S     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | with High Heat Resistance          | ESD-SR-H/HL  | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| Flat type      | Solid Cores                        | ESD-FPL      | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Split Cores (with Metal Clamp)     | ESD-FPD      | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Split Cores (with Plastic Clamp)   | ESD-FPD-1    | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| Bead type      | Bead cores                         | B-20         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

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## DC Line Filters

| Product Family | Product Type                   | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|--------------------------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |                                |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| DIP type       | Common mode power line         | SH          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                | SHO         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Common mode signal line        | SBT-01W     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                | ESD-H       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |                                | D           | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                | Common mode for telephone sets | ST          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Normal mode                    | SBT         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                | SNT         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Bead inductors (lead type)     | B-01        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                | B-02        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                | B-03        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                | B-06        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Bead inductors (winding type)  | B           | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| SMD type       | Common mode power line         | SBS9080     | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |         |
|                |                                | SBP         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                | Common mode signal line        | M-500CT     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                                | M-600T      | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |         |

## AC Line Filters

| Product Family | Product Type    | Series Name       | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|-----------------|-------------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |                 |                   | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Lead type      | Earth inductors | SNG               | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
| DIP type       | Common mode     | SCF-XV            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCR-XV            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCT-XV            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCN-XV            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC                | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-J              | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-GJ             | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-JV             | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-JS             | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-JH             | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-JKH            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC Three-phase    | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-D              | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-D-J/JH         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SC-G/GS           | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCF               | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCF-J/JH          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCF-X Three-phase | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCF Three-phase   | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCR               | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |                 | SCR22             | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

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| Product Family | Product Type | Series Name      | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|--------------|------------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |              |                  | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| DIP type       | Common mode  | SCR25            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SCR31            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SCR38            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SCR47            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SCR Three-phase  | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SCR-H            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SS11V/H          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SS11VL           | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SS17HB           | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SS17VA/HA        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SS20H            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SS21V            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SS24V/H-CH       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SS26V            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SS28V/H-CH       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SS30V            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SS35V/35H        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SSB11V-R/11H-R   | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSB28V/H         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SSHB10H/HS       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSHB21H/HS       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSR10V/H         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSR10VS/HS       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSR21V/H         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SSR21NV/NH       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSR21NV-M/NH-M   | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSR21NVS/NHS     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSR21NVS-M/NHS-M | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSRH7H-M         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSRH7HS-M        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSRH24NH         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSRH24NHS        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSRH24NV         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SSRH24NVS        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU7VC            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU9V/9H          | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU9VF/9HF        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU10VFC-R        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU9HD            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU9VD            | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU10VD           | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SU16VD           | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                | Normal mode  | SN               | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

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# Compliance to RoHS Directive

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RoHS Status RoHS-PRC : Compliant without Exemptions, RoHS-EU : Compliant with Exemptions, RoHS-NO : NOT Compliant

Continued from previous page

| Product Family | Product Type | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|----------------|--------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                |              |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| DIP type       | Nomal mode   | SN-J        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SN-JA       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SN-JB       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SN-W        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SN-P1       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SN-P2       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | HHB         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | SHB         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |         |
|                |              | HHBC        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | SHBC        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                |              | PHBC        | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |

## Noise Filters

| Product Family | Product Type   | Series Name             | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks                                              |
|----------------|----------------|-------------------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|------------------------------------------------------|
|                |                |                         | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |                                                      |
| Casing type    | Metal box      | LF series               | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU(※)  | Not for New Design    | ※LF-202U-1, LF-202-9 are RoHS-PRC                    |
|                |                | HFP series              | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |                                                      |
|                |                | GT series               | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |                                                      |
|                |                | GF series               | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |                                                      |
|                |                | Three-Phase GTX series  | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |                                                      |
|                | Metal cylinder | VU series               | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |                                                      |
|                |                | VC series               | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |                                                      |
|                |                | RG series               | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Not for New Design    |                                                      |
|                |                | VG series               | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Production stoppage   |                                                      |
|                | Plastic box    | MR series               | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC(※) | Under mass production |                                                      |
|                |                | MA series               | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Not for New Design    |                                                      |
|                |                | Single-Phase GTX series | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |                                                      |
| Inlet type     |                | GL series               | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC(※) | Not for New Design    | ※GL-2**OH2, GL-2**OM contain Pb. Status are RoHS-EU. |

## Sensors

| Product Family  | Product Type                          | Series Name     | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|-----------------|---------------------------------------|-----------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                 |                                       |                 | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Thermal sensors | Thermal guard OHD                     | OHD1/3/5R       | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                 | Thermal read switch TRS               | TRS             | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                 |                                       | TRS-P           | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
| Current sensors | Current transformers low current type | CT-05/06/07     | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                 | Snap-on Type CT                       | C/CT            | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                 | Zero-phase current transformer ZCT    | MR-1/2/3/4/1-P5 | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                 |                                       | MR-1-P5         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                 |                                       | MR/C-01         | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |         |
|                 | Magnetic direct current sensor        | LA12            | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                 |                                       | FG              | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |

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## Pyroelectric infrared Sensor

| Product Family | Product Type                          | Series Name  | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks    |
|----------------|---------------------------------------|--------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|------------|
|                |                                       |              | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |            |
| Piezo sensors  | Pyroelectric infrared sensor          | PL-N823-01   | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production | *:N/-W/-BK |
|                |                                       | PL-Q873-02   | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |            |
|                | Lens for Pyroelectric infrared sensor | PL-001L-*    | Y                    | Y                | Y              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-PRC    | Under mass production |            |
|                | Pyroelectric infrared sensor module   | SS-430       | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |            |
|                |                                       | SS-430L-*    | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |            |
|                | Pyroelectric vibration sensor         | VS-AV203/023 | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |            |
|                |                                       | VS-BV203/021 | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |            |
|                |                                       | VS-FV100     | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |            |
|                |                                       | VS-JV10A/02A | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |            |

## Piezo materials

| Product Family  | Product Type                          | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|-----------------|---------------------------------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                 |                                       |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Piezo materials | Langevin bolt-on transducers          | NBL         | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                 | Rectangle, Disc, Ring type transducer | NS/ND/NR    | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                 | Molded waterproof transducer          | TGM         | Y                    | Y                | N              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |

## Multilayer Piezoelectric Actuators

| Product Family                     | Product Type      | Series Name | Restricted Substance |                  |                |                |                 |                  |                 |                  |                 |                  | RoHS Status | Production Status     | Remarks |
|------------------------------------|-------------------|-------------|----------------------|------------------|----------------|----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-------------|-----------------------|---------|
|                                    |                   |             | Cd<br><100ppm        | Cr+6<br><1000ppm | Pb<br><1000ppm | Hg<br><1000ppm | PBB<br><1000ppm | PBDE<br><1000ppm | DBP<br><1000ppm | DEHP<br><1000ppm | BBP<br><1000ppm | DIBP<br><1000ppm |             |                       |         |
| Multilayer Piezoelectric Actuators | Resin coated type | AE/AER      | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                                    |                   | AL          | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                                    | Metal sealed type | ASB         | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                                    |                   | ASL         | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                                    |                   | AHB         | Y                    | Y                | E              | Y              | Y               | Y                | Y               | Y                | Y               | Y                | RoHS-EU     | Under mass production |         |
|                                    |                   |             |                      |                  |                |                |                 |                  |                 |                  |                 |                  |             |                       |         |

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# Precautions



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