

AEC-Q200 AUTOMOTIVE SOLUTIONS

August 2020 Edition

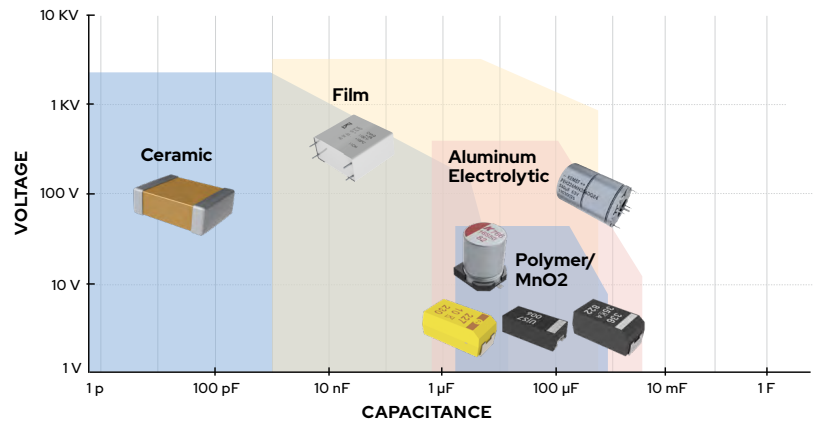
PPAP SUPPORT ISO 9001 IATF 16949

For decades, KEMET has enabled safer, more efficient, and smarter vehicles. We offer a wide range of products for the automotive industry.

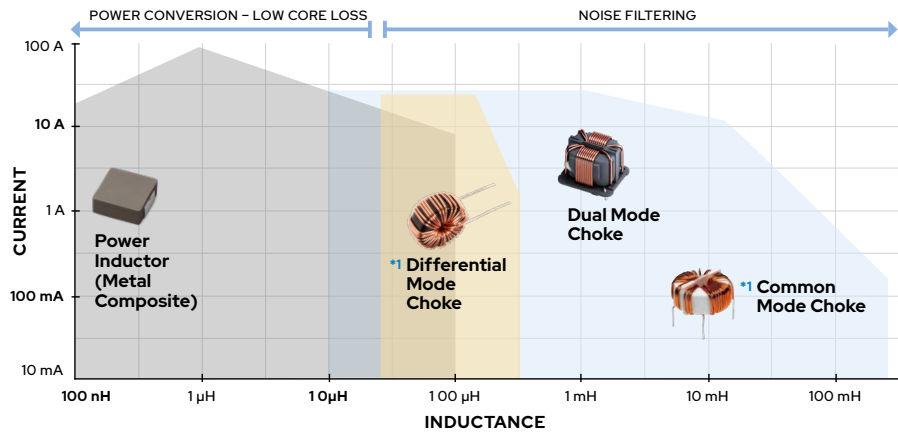
KEMET provides automotive grade components that are designed with safer failure mechanisms and qualified to industry standards, such as AEC-Q200 and VW AUDI 80808. Our parts have been proven on the road and in the lab. We have an extensive track record of reliability. Our automotive grade products are verified to work under harsh temperatures ranging from -50°C to 175°C.

For our complete offering of automotive solutions, visit us at www.kemet.com

CAPACITOR SELECTION



MAGNETICS SELECTION



Additional Resources

Research Parts

Search for parts, view availability, RoHS documentation, or order a sample with ComponentEdge.

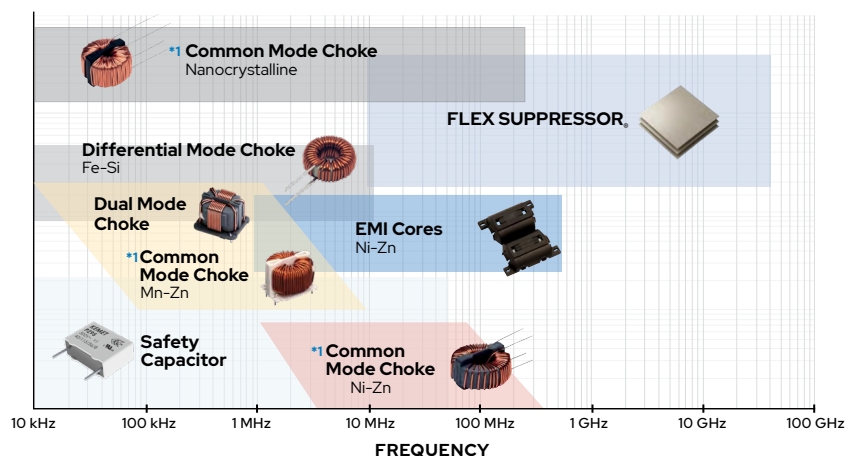
Design It

Test and analyze the performance of passive electronic components with KEMET's simulation tool, K-SIM.


Learn More

Learn how to use and design with our products on our Engineering Center.

EMC SOLUTIONS




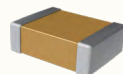
*1 Designed to support AEC-Q200 in system qualification


PRODUCT	SERIES	HIGHLIGHTS
Aluminum 	PEG	Very stable High vibration options Up to 165°C High current Axial, snap-in and SMD
	PEH2xx	
	PHA	
	EDT	
	EDH	
	EDK	


Hybrid	PHA	125°C, low ESR, higher ripple than axial, lower leakage than Polymer
---------------	-----	--

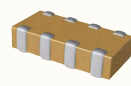
 Aluminum Polymer	A768	Ultra low impedance, up to 2K hours at 125°C, high ripple capability, anti-vibration for 10mm
--	------	---

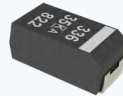
PRODUCT	SERIES	HIGHLIGHTS
Film 	R76H	Harsh Environment: F862-V054, F863, R41T, R75H, R76H
	F863	
	C4E	
	F862-V054	
	LDE	
	P295	High Temperature: R75H, R76H, JSN, LDE, R8x
	JSN	
	C4AF	
	C4AQ	SMD Available: LDE, JSN, F161, P295
	F5B	
	R41T	High Ripple Current
	R6x	
	R75H	
	R8x	Self Healing
	SMR	
	F161	


PRODUCT	SERIES	HIGHLIGHTS
Ceramic 	Type: SMD	Standard and High voltage 6.3V to 3kV COG and X7R High temperature up to 150C X8R & X8L ESD Rated X7R and COG (HBM - AEC Q200-002) VW80808 X7R Specification (High current applications) X7R Arc-shield X7R (Patented internal arc protection) X8R X8L KC-LINK™ COG (Fast switching semiconductor applications) KONNEKT High Density Packaging, Flex Mitigation: Flex Termination COG, U2J, X7R, X8R, X8L, Open Mode X7R , Floating Electrode X7R
	Auto	
	COG	
	U2J	
	X7R	
	X8R	
	X8L	


	Type: Axial & Radial Aximax 400 and Goldmax 300: COG, X7R, X8R, X8L	Conformally coated, no PCB required, flex mitigation, microphonic noise reduction, design versatility (non-polar, lead forms and spacing), highly versatile mounting, high vibration capability
--	--	---




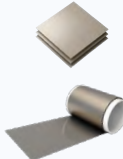

	Type: KPS KPS SMD Auto: X7R X8L	Higher capacitance in the same footprint, potential board space savings, advanced protection against thermal and mechanical stress, provides up to 10mm flex capability, reduces audible and microphonic noise, non-polar device
---	---	--


	Type: ARRAY Array Auto: COG X7R	Flex mitigation, saves both circuit board and inventory space, reduces placement costs and increases throughput
--	---	---

PRODUCT	SERIES	HIGHLIGHTS	
KO-CAP Polymer 	T598	High volumetric efficiency, stable capacitance with temperature, voltage and frequency, extended lifetime and low ESR	
	T597		Small Case 125°C
	T599		150°C, 125°C

PRODUCT	SERIES	HIGHLIGHTS	
Tantalum MnO₂ 	T489	High volumetric efficiency, extended lifetime	
	T491/5		125°C
	T498		150°C
	T499		175°C

PRODUCT	SERIES	HIGHLIGHTS
Power Inductor 	MPLCV	Metal composite powder, High current, Low DCR, +155°C operating temperature
	MPCV	
	MPXV	

PRODUCT	SERIES	HIGHLIGHTS
Magnetics 	Differential Mode Chokes	High performance Miniaturization Customization available
	HHBC	
	PHBC	
	Common Mode Chokes	High performance Miniaturization Customization available
	SC	
	SCR	
	SC-D	
	SCF	
	EMI Cores	High frequency noise suppression, Easy to attach
	ESD-SR-xxxHL	
	FLEX SUPPRESSOR	Noise suppression MHz to GHz band Effective for electromagnetic wave and resonance suppression Thin, flexible countermeasures Easy to use, in even tightest spaces
	FF1	
	EFF4	
	Ferrite tiles	Proprietary ferrite material technology High performance for Wireless Power Transfer (WPT) High operating frequency range and low loss
	FPL	

PRODUCT	SERIES	HIGHLIGHTS
Transient Protection 	ESD MLCC	ESD, VW80808 Varistors circuit protection
	VA, VC, VE	
	VK, VM, VG	