

Material Composition Declaration

Film Metallized PET-PPS & Paper Capacitors



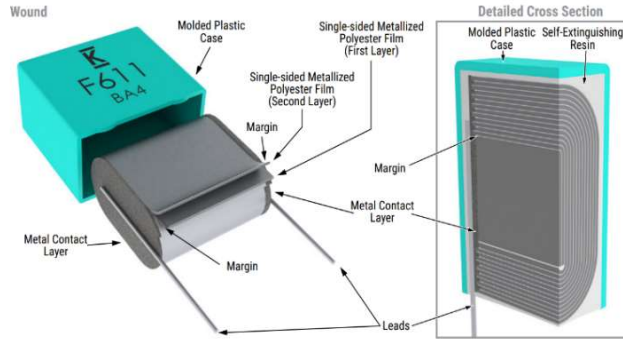
Remarks:

- KEMET Electronics Corporation Material Composition Declarations are based on raw material data and manufacturing processes in use at the time and date of declaration. The information provided is business confidential prepared exclusively for business purposes and must not be printed, copied, distributed or disclosed without prior written consent and authorization from KEMET Electronics Corporation.
- All Information given herein is believed to be accurate and reliable, but it is presented without guarantee, warranty, or responsibility of any kind, expressed or implied.
- KEMET ACCEPTS NO DUTY TO NOTIFY USERS ABOUT CHANGES TO A MATERIAL DECLARATION. KEMET IS NOT LIABLE FOR ANY DAMAGES, DIRECT OR INDIRECT, CONSEQUENTIAL OR OTHERWISE, THAT THE READER MIGHT INCUR AS A RESULT OF IGNORING THIS WARNING, OR THAT ANY THIRD PARTY MIGHT SUFFER AS A RESULT OF THE READER'S IGNORING THIS WARNING.
- Miscellaneous refers to substances that are below 0.1% by weight and are not restricted and/or banned substances based on IMDS reportable substance/ban list.
- Values (%) are based on engineering calculations and do not represent exact amount contained in product.
- All statements herein are based in our present knowledge. If products are used properly, there are no risks to humans and/or the environment.
- KEMET reserves the right to change and/or update this information without notification.
- KEMET's web site will be maintained updated to show the most current data <https://www.kemet.com/en/us/rohs-documents.html>

Material Declaration Radial Plastic Film Capacitor

F611 Series [Wound technology] Metallized Polyester Film, 5 – 37.5 mm Lead Spacing, 50 – 1,000 VDC

Construction



Voltage Range : 50 – 1000 VDC

Capacitance Range : 0.001 – 180 µF

Lead Spacing : 5 -37.5 mm

Environmental Compliance

Pb Free	YES
RoHS Compliant	YES
Halogen Free	YES

https://content.kemet.com/datasheets/KEM_F3065_F611_F612.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 1	PET	25038-59-9
		Aluminum		Al	7429-90-5
	Metal Spray	Tin		Sn	7440-31-5
		Zinc		Zn	7440-66-6
		Aluminum		Al	7429-90-5
		Copper (*)		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
	Halogen free plastic case	PBT		PBT	26062-94-2
		Glass Fiber		GF	65997-17-3
		Organic phosphorous compound FR		-	-
		Tetrahydrofuran	-	109-99-9	
Termination	Core Metal	Iron (*)	Fe	7439-89-6	
	Core Metal	Nickel (*)	Ni	7440-02-0	
	Core Metal	Copper	Cu	7440-50-8	
	Finish plating	Tin	Sn	7440-31-5	

(*) version available for some PNs

Remark: Material declaration of special part number will be individually released

Annex 1

Material Declaration Radial Plastic Film Capacitor

F611 Series [Wound technology] [Metallized Polyester Film, 5 – 37.5 mm Lead Spacing, 50 – 1,000 VDC](#)

Pitch mm				5	7,5	10	15	22,5	27,5	37,5
Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size Cap 0.047uF Box dimension 7.2x13x7.2 mm	MAXIMUM size Cap 0.047uF Box dimension 6x12x10.5 mm	MAXIMUM size Cap 0.22uF Box dimension 6x12x13 mm	MAXIMUM size Cap 15uF Box dimension 11x19x18 mm	MAXIMUM size Cap 1.5uF Box dimension 15.5x24.5x26 mm	MAXIMUM size Cap 68uF Box dimension 22x37x31.5 mm	MAXIMUM size Cap 180uF Box dimension 30x45x41 mm
				Weight (gr)	Weight (gr)	Weight (gr)	Weight (gr)	Weight (gr)	Weight (gr)	Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0,328	0,251	0,417	2,161	6,492	13,049	40,911
	Metal	Al	7429-90-5	0,004	0,003	0,004	0,017	0,043	1,073	1,473
	Metal	Sn	7440-31-5	0,043	0,024	0,030	0,115	0,229	0,847	0,954
	Metal	Zn	7440-66-6	0,133	0,075	0,093	0,354	0,707	1,007	1,134
	Metal	Cu (*)	7440-50-8	-	-	-	-	-	0,028	0,032
Homogeneous Level Weight				0,509	0,353	0,543	2,647	7,470	16,006	44,503
Encapsulation	Thermosetting Resin	EP	-	0,249	0,395	0,388	1,474	3,281	7,297	7,417
	Halogen free plastic case	PBT	26062-94-2	0,188	0,265	0,305	0,868	1,986	3,970	6,576
		Glass Fiber	65997-17-3	0,035	0,050	0,057	0,163	0,372	0,992	1,644
		Organic phosphorous compound FR	-	0,011	0,015	0,017	0,049	0,112	-	-
	Tetrahydrofuran	109-99-9	0,001	0,002	0,002	0,005	0,012	-	-	
Homogeneous Level Weight				0,484	0,726	0,769	2,560	5,763	12,259	15,637
Termination	Core Metal	Iron (*)	7439-89-6	0,088	-	-	-	-	-	-
	Core Metal	Nickel (*)	7440-02-0	-	-	-	-	-	0,001	0,004
	Core Metal	Copper	7440-50-8	0,024	0,152	0,158	0,401	0,502	0,231	1,045
	Finish plating	Tin	7440-31-5	0,005	0,005	0,006	0,011	0,013	0,003	0,010
Homogeneous Level Weight				0,117	0,157	0,164	0,411	0,515	0,235	1,060
Total Weight				1,109	1,235	1,477	5,619	13,749	28,500	61,200

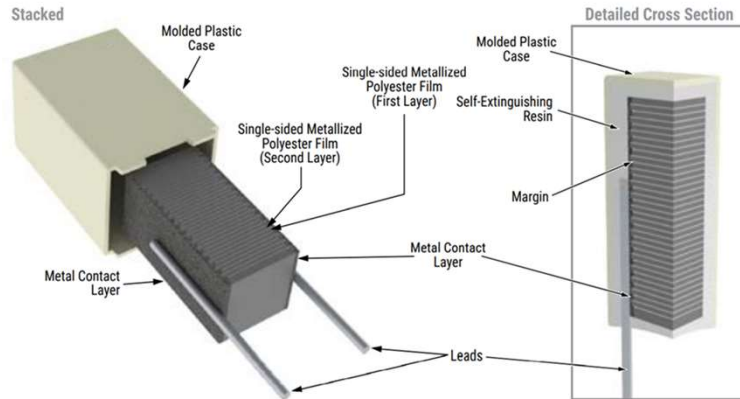
(*) version available for some PNs

Remark: Material declaration of special part number will be individually released

Material Declaration Radial Plastic Film Capacitor

F612 Series [Stacked technology] Metallized Polyester Film, 5 – 37.5 mm Lead Spacing, 50 – 1,000 VDC

Construction



Voltage Range : 50 – 400 VDC

Capacitance Range : 0.001 – 4.7 μ F

Lead Spacing : 5 mm

Environmental Compliance

Pb free	YES
RoHS Compliant	YES
Halogen Free	YES

https://content.kemet.com/datasheets/KEM_F3065_F611_F612.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 2	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Aluminium		Al	7429-90-5
	Metal Spray	Tin		Sn	7440-31-5
		Zinc		Zn	7440-66-6
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
		Titanium-dioxide		TiO ₂	13463-67-7
	Halogen free plastic case	PBT		PBT	26062-94-2
		Glass Fiber		GF	65997-17-3
		Organic phosphorous compound FR	-	-	
Tetrahydrofuran	-	109-99-9			
Termination	Core Metal	Copper	Cu-ETP	7440-50-8	
	Finish plating	Tin	EP-Sn	7440-31-5	

Remark: Material declaration of special part number will be individually released

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 2

Material Declaration Radial Plastic Film Capacitor

F612 Series [Stacked technology] [Metallized Polyester Film, 5 – 37.5 mm Lead Spacing, 50 – 1,000 VDC](#)



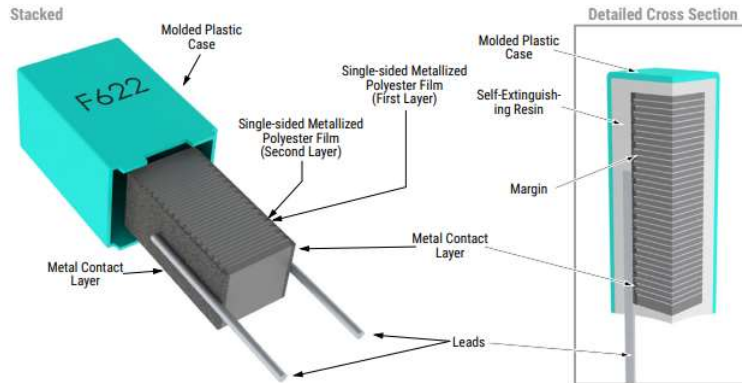
Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 2,2 uF Box dimension 6,0x11x7,2 mm
				Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0,227
	Metal	Al	7429-90-5	0,051
	Metal	Sn	7440-31-5	0,153
	Metal	Zn	7440-66-6	0,032
	Metal	Cu	7440-50-8	0,006
Homogeneous Level Weight				0,469
Encapsulation	Thermosetting Resin	Modified cured EP	-	0,178
		Titanium-dioxide	13463-67-7	0,002
	Halogen free plastic case	PBT	26062-94-2	0,136
		Glass Fiber	65997-17-3	0,026
		Organic phosphorous compound FR	-	0,008
	Tetrahydrofuran	109-99-9	0,001	
Homogeneous Level Weight				0,350
Termination	Core Metal	Cu-ETP	7440-50-8	0,095
	Finish plating	EP-Sn	7440-31-5	0,003
Homogeneous Level Weight				0,098
Total Weight				0,917

Remark: Material declaration of special part number will be individually released

Material Declaration Radial Plastic Film Capacitor

F622 Series [Stacked technology] Metallized Polyester Film, 5 mm Lead Spacing, 50 – 630 VDC

Construction



Voltage Range : 50 – 630 VDC

Capacitance Range : 0.001 – 4.7 μ F

Lead Spacing : 5 mm

Environmental Compliance

Pb Free	YES
RoHS Compliant	YES
Halogen Free	YES

https://content.kemet.com/datasheets/KEM_F3066_F622.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 3	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Aluminium		Al	7429-90-5
	Metal Spray	Tin		Sn	7440-31-5
		Zinc		Zn	7440-66-6
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
		Titanium-dioxide		TiO ₂	13463-67-7
	Halogen free plastic case	PBT		PBT	26062-94-2
		Glass Fiber		GF	65997-17-3
		Organic phosphorous compound FR	-	-	
Tetrahydrofuran	-	109-99-9			
Termination	Core Metal	Copper	Cu-ETP	7440-50-8	
	Finish plating	Tin	EP-Sn	7440-31-5	

Remark: Material declaration of special part number will be individually released

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 3

Material Declaration Radial Plastic Film Capacitor



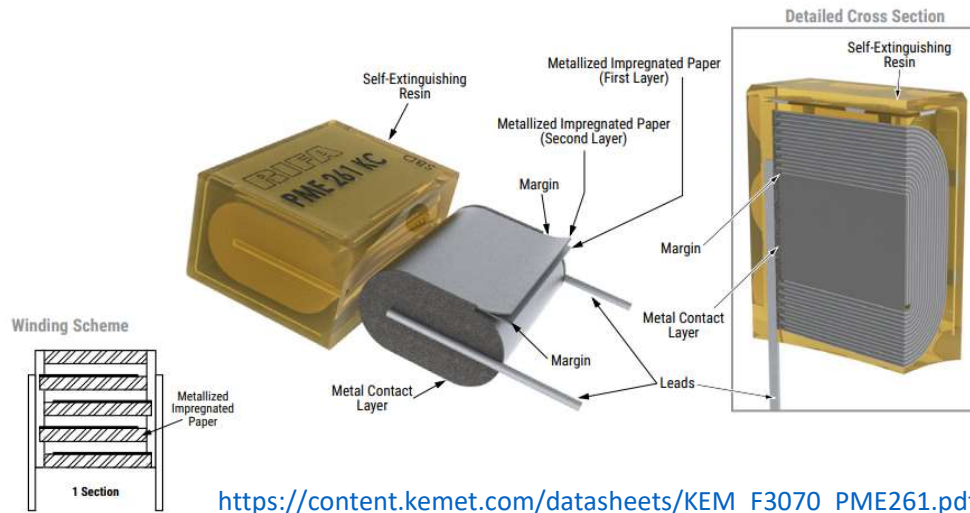
F622 Series [Stacked technology]] Metallized Polyester Film, 5 mm Lead Spacing, 50 – 630 VDC

Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 2,2 uF Box dimension 6,0x11x7,2 mm
				Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0,227
	Metal	Al	7429-90-5	0,051
	Metal	Sn	7440-31-5	0,153
	Metal	Zn	7440-66-6	0,032
	Metal	Cu	7440-50-8	0,006
Homogeneous Level Weight				0,469
Encapsulation	Thermosetting Resin	Modified cured EP	-	0,178
		Titanium-dioxide	13463-67-7	0,002
	Halogen free plastic case	PBT	26062-94-2	0,136
		Glass Fiber	65997-17-3	0,026
		Organic phosphorous compound FR	-	0,008
	Tetrahydrofuran	109-99-9	0,001	
Homogeneous Level Weight				0,350
Termination	Core Metal	Cu-ETP	7440-50-8	0,095
	Finish plating	EP-Sn	7440-31-5	0,003
Homogeneous Level Weight				0,098
Total Weight				0,917

Remark: Material declaration of special part number will be individually released

Material Declaration Impregnated Metallized Paper Capacitor

PME261 Series [Metallized Impregnated Paper, 10.2 – 25.4 mm Lead Spacing, 400 – 1,000 VDC](#)



https://content.kemet.com/datasheets/KEM_F3070_PME261.pdf

Voltage Range : 400 - 1000 VDC, 220 - 500 VAC

Capacitance Range : 0.001 - 1 μ F

Size Range : 3.9x7.5x13.5 - 15.3x22x30.5

Environmental Compliance	
Pb Free	YES
RoHS Compliant	YES
Halogen Free	NO

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized Paper	Capacitor paper	see Annex 4	-	-
		Zinc		Zn	7440-66-6
		Silver		Ag	7440-22-4
	Paper Film	Capacitor paper		-	-
	Metal Spray	Tin		Sn	7440-31-5
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Epoxy resin		Epoxy resin	-
		Halogenated Flame Ret. except for PBB and PBDE		-	-
	Label material	PBT		PBT	26062-94-2
		Aluminium		Al	7429-90-5
Termination	Tin coated CLAD steel wire	Iron		Fe	7439-89-6
		Copper		Cu	7440-50-8
		Nickel	Ni	7440-02-0	
		Tin	Sn	7440-31-5	

Remark: Material declaration of special part number will be individually released

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 4

Material Declaration Impregnated Metallized Paper Capacitor



PME261 Series [Metallized Impregnated Paper, 10.2 – 25.4 mm Lead Spacing, 400 – 1,000 VDC](#)

Pitch mm				10.2	15.2	20.3	25.4
Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size Cap 0.022µF Box dimension 5.1x10.5x13.5 mm	MAXIMUM size Cap 0.033uF Box dimension 7.8x13.5x18.5 mm	MAXIMUM size Cap 0.33uF Box dimension 11.3x16.5x24 mm	MAXIMUM size Cap 0.1uF Box dimension 15.3x22x30.5 mm
				Weight (gr)	Weight (gr)	Weight (gr)	Weight (gr)
Element	Capacitor paper	Capacitor paper	-	0.208	0.877	2.285	5.817
	Metal	Zn	7440-66-6	0.001	0.004	0.011	0.028
	Metal	Ag	7440-22-4	0.00005	0.00022	0.00057	0.00146
	Metal	Sn	7440-31-5	0.263	0.696	1.110	2.270
	Metal	Cu	7440-50-8	0.001	0.003	0.006	0.011
Homogeneous Level Weight				0.473	1.5808	3.4112	8.1282
Encapsulation	Thermosetting Resin	Epoxy resin	-	0.326	0.832	2.044	4.118
	Flame retardant	Halogenated Flame Ret. except for PBB and PBDE	-	0.103	0.263	0.646	1.301
	Label material	PBT	26062-94-2	0.054	0.138	0.237	0.399
		Al	7429-90-5	0.046	0.122	0.203	0.341
Homogeneous Level Weight				0.529	1.354	3.1296	6.1588
Termination	Tin coated CLAD steel wire	Fe	7439-89-6	0.159	0.283	0.356	0.555
		Cu	7440-50-8	0.035	0.076	0.096	0.149
		Ni	7440-02-0	0.001	0.002	0.003	0.003
		Sn	7440-31-5	0.002	0.003	0.004	0.005
Homogeneous Level Weight				0.198	0.365	0.459	0.713
Total Weight				1.200	3.300	7.000	15.000

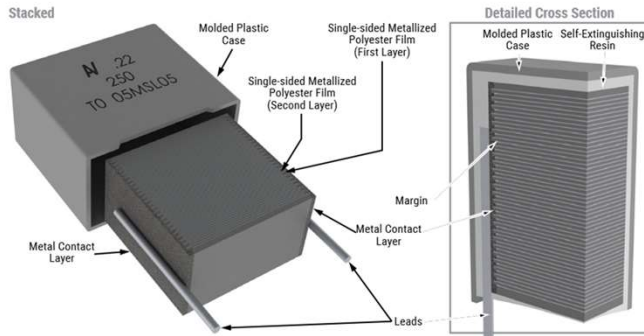
Remark: Material declaration of special part number will be individually released

Material Declaration Radial Plastic Film Capacitor

R60 SERIES [Stacked technology] Metallized Polyester Film (Automotive Grade)



Construction cont.



Voltage Range : 50 – 630 VDC

Capacitance Range : 0.047 – 1.5 μ F

Size range: 4x9x13 -- 6x12x13

Environmental Compliance

Pb Free	YES
RoHS Compliant	YES
Halogen Free	NO

https://content.kemet.com/datasheets/KEM_F3103_R60.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 5	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Aluminium		Al	7429-90-5
	Metal Spray	Tin		Sn	7440-31-5
		Zinc		Zn	7440-66-6
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
		Titanium-dioxide		TiO2	13463-67-7
	Plastic Case	PBT		PBT	24968-12-5
		Antimony trioxide		Sb2O3	1309-64-4
		Glass Fiber (*)	GF	-	
		Halogenated Flame Ret. except for PBB and PBDE	-	-	
Termination	Core Metal	Copper	Cu-ETP	7440-50-8	
	Finish plating	Tin	EP-Sn	7440-31-5	

(*) alternative available for some PNs

Remark: Material declaration of special part number will be individually released.

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 5

Material Declaration Radial Plastic Film Capacitor

R60 SERIES [Stacked technology] [Metallized Polyester Film \(Automotive Grade\)](#) Pitch 10 mm



Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 5,6 uF Box dimension 6x12x13mm
				Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0,434
	Metal	Al	7429-90-5	0,050
	Metal	Sn	7440-31-5	0,125
	Metal	Zn	7440-66-6	0,010
	Metal	Cu	7440-50-8	0,004
Homogeneous Level Weight				0,623
Encapsulation	Thermosetting Resin	Modified cured EP	-	0,280
		Titanium-dioxide	13463-67-7	0,003
	Thermoplastics	PBT	24968-12-5	0,321
	Flame retardant	Antimony trioxide	1309-64-4	0,018
		Halogenated Flame Ret. except for PBB and PBDE	-	0,018
Homogeneous Level Weight				0,640
Termination	Core Metal	Cu-ETP	7440-50-8	0,082
	Finish plating	EP-Sn	7440-31-5	0,003
Homogeneous Level Weight				0,085
Total Weight				1,348

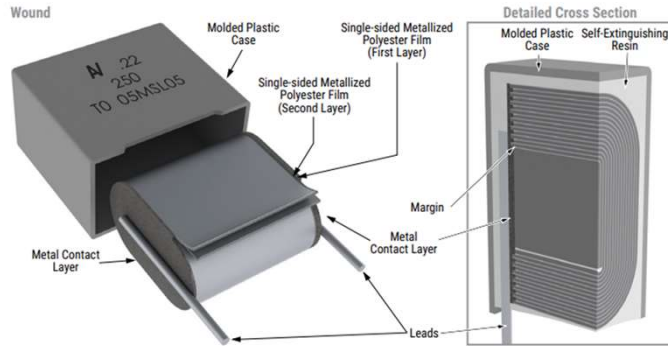
Remark: Material declaration of special part number will be individually released.

Material Declaration Radial Plastic Film Capacitor

R60 SERIES [Wound technology] Metallized Polyester Film (Automotive Grade)



Construction



Voltage Range : 50 – 1000 VDC

Capacitance Range : 0.001 – 150 μ F

Lead spacing: 10.0-37.5mm

Environmental Compliance

Pb Free	YES
RoHS Compliant	YES
Halogen Free	NO

https://content.kemet.com/datasheets/KEM_F3103_R60.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 6	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Aluminium (*)		Al	7429-90-5
		Zinc		Zn	7440-66-6
		Tin		Sn	7440-31-5
Encapsulation	Thermosetting Resin	PU Resin		Cu	7440-50-8
		Titanium-dioxide		PU	-
	Plastic Case	PBT		TiO2	13463-67-7
		Antimony trioxide		PBT	24968-12-5
		Halogenated Flame Ret. except for PBB and PBDE		Sb2O3	1309-64-4
Termination	Core Metal	Glass Fiber	-	-	
		Copper	GF	65997-17-3	
		Tin	Cu-ETP	7440-50-8	
		Iron (*)	EP-Sn	7440-31-5	
		Copper (*)	Fe	1309-37-1	
Plating	Copper (*)	Cu	7440-50-8		
	Tin (*)	EP-Sn	7440-31-5		

(*) alternative available for some PNs

Remark: Material declaration of special part number will be individually released.

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 6

Material Declaration Radial Plastic Film Capacitor

R60 SERIES [Wound technology] [Metallized Polyester Film \(Automotive Grade\)](#)



Pitch mm				10	15	22,5	27,5	37,5
Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 0,047 uF Box dimension 6x12x13 mm	MAXIMUM size - Cap 4,7 uF Box dimension 11x19x18 mm	MAXIMUM size - Cap 10 uF Box dimension 13x22x26,5 mm	MAXIMUM size - Cap 68 uF Box dimension 22x37x32 mm	MAXIMUM size - Cap 150 uF Box dimension 30x45x41.5 mm
				Weight (gr)	Weight (gr)	Weight (gr)	Weight (gr)	Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0,382	2,099	4,274	15,760	35,350
	Metal	Al (*)	7429-90-5	0,003	0,033	0,058	0,351	0,154
	Metal	Zn	7440-66-6	0,147	0,151	0,150	0,166	0,180
	Metal	Sn	7440-31-5	0,022	0,081	0,059	0,273	0,449
	Metal	Cu	7440-50-8	0,001	0,003	0,002	0,009	0,015
Homogeneous Level Weight				0,554	2,367	4,542	16,559	36,148
Encapsulation	Thermosetting Resin	PU Resin	-	0,515	2,348	4,075	8,593	37,83
		Titanium-dioxide	13463-67-7	0,008	0,035	0,061	0,128	0,567
	Thermoplastics	PBT	24968-12-5	0,270	0,900	1,650	4,360	7,460
	Flame retardant	Antimony trioxide	1309-64-4	0,018	0,060	0,110	0,420	0,740
		Halogenated Flame Ret. except for PBB and PBDE	-	0,018	0,060	0,110	0,420	0,740
Glass Fiber	GF	65997-17-3	0,054	0,180	0,330	0,90	1,580	
Homogeneous Level Weight				1,729	3,403	6,006	14,821	47,337
Termination	Core Metal	Cu-ETP	7440-50-8	0,1736	0,1862	0,3929	0,3395	0,6305
	Finish plating	EP-Sn	7440-31-5	0,0054	0,0058	0,0122	0,0105	0,0195
	Core Metal	Fe (*)	1309-37-1	0,1432	0,315	0,3322	0,287	0,533
	Plating	Cu-ETP (*)	7440-50-8	0,0232	0,0499	0,0526	0,0455	0,0975
	Finish plating	EP-Sn (*)	7440-31-5	0,0125	0,0192	0,0202	0,0175	0,0195
Homogeneous Level Weight				0,179	0,192	0,4051	0,3500	0,6500
Total Weight				2,462	5,962	10,953	31,730	84,135

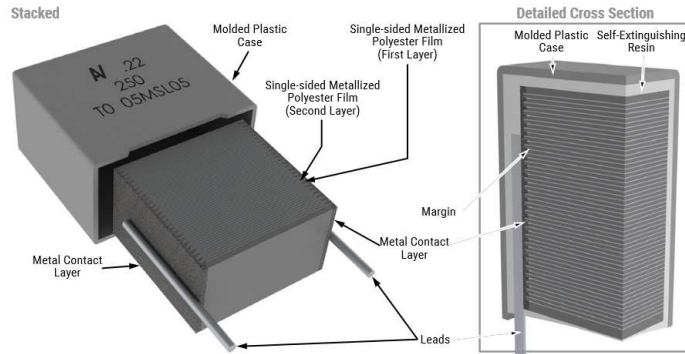
(*) alternative available for some PNs

Remark: Material declaration of special part number will be individually released.

Material Declaration Radial Plastic Film Capacitor

R66 SERIES [Stacked technology] Metallized Polyester Film 7.5 mm Lead Space, 50 – 630 VDC (Automotive Grade)

Construction cont.



Voltage Range : 50 – 630 VDC

Capacitance Range : 0.01 – 4.7 μ F

Size range: 3x8x10 -- 6x12x10.5

https://content.kemet.com/datasheets/KEM_F3102_R66.pdf

Environmental Compliance	
Pb Free	YES
RoHS Compliant	YES
Halogen Free	NO

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 7	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Aluminium		Al	7429-90-5
	Metal Spray	Tin		Sn	7440-31-5
		Zinc		Zn	7440-66-6
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
		Titanium-dioxide		TiO2	13463-67-7
	Plastic Case	PBT		PBT	24968-12-5
		Antimony trioxide		Sb2O3	1309-64-4
		Glass Fiber (*)	GF	-	
		Halogenated Flame Ret. except for PBB and PBDE	-	-	
Termination	Core Metal	Copper	Cu-ETP	7440-50-8	
	Finish plating	Tin	EP-Sn	7440-31-5	

(*) alternative available for some PN's

Remark: Material declaration of special part number will be individually released.

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 7



Material Declaration Radial Plastic Film Capacitor

R66 SERIES [Stacked technology] [Metallized Polyester Film 7.5 mm Lead Space, 50 – 630 VDC \(Automotive Grade\)](#)

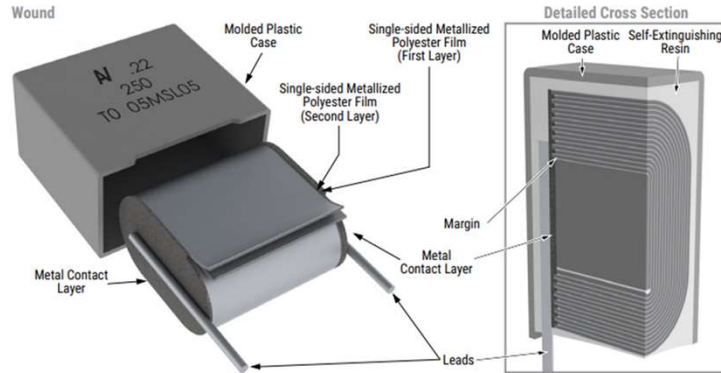
Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 4,7 uF Box dimension 6,0x12x10,5mm
				Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0,373
	Metal	Al	7429-90-5	0,042
	Metal	Sn	7440-31-5	0,127
	Metal	Zn	7440-66-6	0,010
	Metal	Cu	7440-50-8	0,004
Homogeneous Level Weight				0,556
Encapsulation	Thermosetting Resin	Modified cured EP	-	0,198
		Titanium-dioxide	13463-67-7	0,002
	Thermoplastics	PBT	24968-12-5	0,266
	Flame retardant	Antimony trioxide	1309-64-4	0,015
		Halogenated Flame Ret. except for PBB and PBDE	-	0,015
Homogeneous Level Weight				0,496
Termination	Core Metal	Cu-ETP	7440-50-8	0,0821
	Finish plating	EP-Sn	7440-31-5	0,0025
Homogeneous Level Weight				0,0846
Total Weight				1,137

Remark: Material declaration of special part number will be individually released.

Material Declaration Radial Plastic Film Capacitor

R66 SERIES [Wound technology] Metallized Polyester Film 7.5 mm Lead Space, 50 – 630 VDC (Automotive Grade)

Construction



Voltage Range : 630 VDC

Capacitance Range : 0.001 – 0.0068 μF

Lead spacing: 7.5 mm

Environmental Compliance

Environmental Compliance	
Pb Free	YES
RoHS Compliant	YES
Halogen Free	NO

https://content.kemet.com/datasheets/KEM_F3102_R66.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 8	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Zinc		Zn	7440-66-6
		Tin		Sn	7440-31-5
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
	Plastic Case	PBT		PBT	24968-12-5
		Antimony trioxide		Sb2O3	1309-64-4
		Halogenated Flame Ret. except for PBB and PBDE		-	-
Termination	Core Metal	Copper		Cu	7440-50-8
	Finish plating	Tin		Sn	7440-31-5

Remark: Material declaration of special part number will be individually released.

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 8

Material Declaration Radial Plastic Film Capacitor

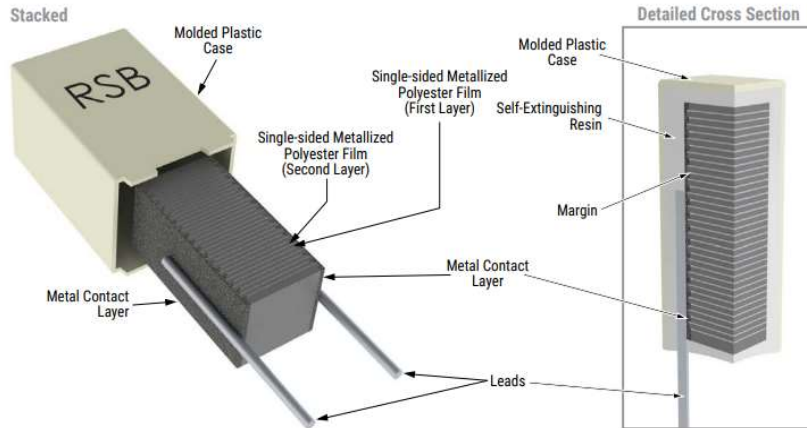
R66 SERIES [Wound technology] [Metallized Polyester Film 7.5 mm Lead Space, 50 – 630 VDC \(Automotive Grade\)](#)

Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 0,0068 uF Box dimension 4x9x10 mm
				Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0,1280
	Metal	Al	7429-90-5	0,0010
	Metal	Zn	7440-66-6	0,0609
	Metal	Sn	7440-31-5	0,0495
	Metal	Cu	7440-50-8	0,0017
Homogeneous Level Weight				0,2411
Encapsulation	Thermosetting Resin	Modified cured EP	-	0,1610
	Thermoplastics	PBT	24968-12-5	0,1728
	Flame retardant	Antimony trioxide	1309-64-4	0,0096
		Halogenated Flame Ret. except for PBB and PBDE	-	0,0096
Homogeneous Level Weight				0,3530
Termination	Core Metal	Cu-ETP	7440-50-8	0,0912
	Finish plating	EP-Sn	7440-31-5	0,0028
Homogeneous Level Weight				0,0940
Total Weight				0,6881

Remark: Material declaration of special part number will be individually released.

Material Declaration Radial Plastic Film Capacitor

RSB Series [Stacked technology] 5 mm Lead Spacing, 50 – 630 VDC, Metallized Polyester Film (Automotive Grade)



Voltage Range : 50 – 630 VDC

Capacitance Range : 0.001 – 4.7 μ F

Lead Spacing : 5 mm

Environmental Compliance	
Pb Free	YES
RoHS Compliant	YES
Halogen Free	NO

https://content.kemet.com/datasheets/KEM_F3067_RSB.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 9	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Aluminium		Al	7429-90-5
	Metal Spray	Tin		Sn	7440-31-5
		Zinc		Zn	7440-66-6
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
		Titanium-dioxide		TiO ₂	13463-67-7
	Plastic Case	PBT		PBT	24968-12-5
		Antimony trioxide		Sb ₂ O ₃	1309-64-4
		Halogenated Flame Ret. except for PBB and PBDE	-	-	
Termination	Core Metal	Copper	Cu-ETP	7440-50-8	
	Finish plating	Tin	EP-Sn	7440-31-5	

Remark: Material declaration of special part number will be individually released

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 9

Material Declaration Radial Plastic Film Capacitor

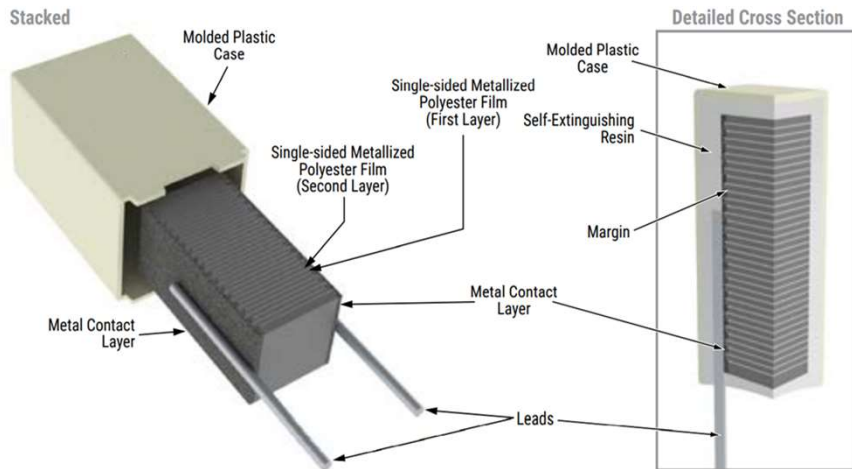
RSB Series [Stacked technology] [5 mm Lead Spacing, 50 – 630 VDC, Metallized Polyester Film \(Automotive Grade\)](#)



Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 4,7 uF Box dimension 7,2x13x7,2 mm
				Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0.391
	Metal	Al	7429-90-5	0.086
	Metal	Sn	7440-31-5	0.253
	Metal	Zn	7440-66-6	0.054
	Metal	Cu	7440-50-8	0.010
Homogeneous Level Weight				0.793
Encapsulation	Thermosetting Resin	Modified cured EP	-	0.251
		Titanium-dioxide	13463-67-7	0.003
	Thermoplastics	PBT	24968-12-5	0.212
	Flame retardant	Antimony trioxide	1309-64-4	0.012
		Halogenated Flame Ret. except for PBB and PBDE	-	0.012
Homogeneous Level Weight				0.489
Termination	Core Metal	Cu-ETP	7440-50-8	0.095
	Finish plating	EP-Sn	7440-31-5	0.003
Homogeneous Level Weight				0.098
Total Weight				1.380

Material Declaration Radial Plastic Film Capacitor

R82 Series [Stacked technology] Metallized Polyester Film, 5 mm Lead Space, 50 – 400 VDC (Automotive Grade)



Voltage Range : 50 – 400 VDC

Capacitance Range : 0.001 – 4.7 μ F

Lead Spacing : 5 mm

Environmental Compliance	
Pb Free	YES
RoHS Compliant	YES
Halogen Free	NO

https://content.kemet.com/datasheets/KEM_F3101_R82.pdf

Homogeneous Level	Construction Element	Substance	Weight (gr)	Common Name	CAS #
Element	Metallized PET Film	PET	see Annex 10	PET	25038-59-9
		Aluminium		Al	7429-90-5
	Metal Spray	Aluminium		Al	7429-90-5
	Metal Spray	Tin		Sn	7440-31-5
		Zinc		Zn	7440-66-6
		Copper		Cu	7440-50-8
Encapsulation	Thermosetting Resin	Modified cured EP		Epoxy resin	-
		Titanium-dioxide		TiO ₂	13463-67-7
	Plastic Case	PBT		PBT	24968-12-5
		Antimony trioxide		Sb ₂ O ₃	1309-64-4
		Halogenated Flame Ret. except for PBB and PBDE	-	-	
Termination	Core Metal	Copper	Cu-ETP	7440-50-8	
	Finish plating	Tin	EP-Sn	7440-31-5	

Remark: Material declaration of special part number will be individually released

<https://www.kemet.com/en/us/rohs-documents.html>

Annex 10

Material Declaration Radial Plastic Film Capacitor

R82 Series [Stacked technology] [Metallized Polyester Film, 5 mm Lead Space, 50 – 400 VDC \(Automotive Grade\)](#)

Homogeneous Level	Material	Substance	CAS No.	MAXIMUM size - Cap 4,7 uF Box dimension 7,2x13x7,2 mm
				Weight (gr)
Element	Thermoplastics	PET	25038-59-9	0.391
	Metal	Al	7429-90-5	0.086
	Metal	Sn	7440-31-5	0.253
	Metal	Zn	7440-66-6	0.054
	Metal	Cu	7440-50-8	0.010
Homogeneous Level Weight				0.793
Encapsulation	Thermosetting Resin	Modified cured EP	-	0.251
		Titanium-dioxide	13463-67-7	0.003
	Thermoplastics	PBT	24968-12-5	0.212
	Flame retardant	Antimony trioxide	1309-64-4	0.012
		Halogenated Flame Ret. except for PBB and PBDE	-	0.012
Homogeneous Level Weight				0.489
Termination	Core Metal	Cu-ETP	7440-50-8	0.095
	Finish plating	EP-Sn	7440-31-5	0.003
Homogeneous Level Weight				0.098
Total Weight				1.380