

## **MKP Film Capacitor**

## **Material Data Sheet**

0.6

23.2

2

1.2

7631-86-9

7439-89-6

7440-50-8

7440-31-5

7440-31-5

Not available

10

100

94

4

2

99.3

B3   Date 18   IMDS ID N/   if available 10		MKP Motor run round B32330x / B32332x 18/11/2019 NA 5.02.1a (03/2019)						
						Super-M-Cap ave a secont ave a secont a		
						EPECCE BUF EPECCE BUF EPECCE BUF EPECCE BUF		
Product Part (IMDS: semi component)	Material Class (IMDS: Material)		Material (Classification) VDA 231	Substance	TMPS**) [wt%]	CAS if applicable	typical mass of material [wt-%]	Traces see 1)
Active Part	Thermoplastic		2A	PP	100	9003-07-0	35	
	Light Metal		1B	AL 6		7429-90-5		
	Heavy Metal		1C	Zn	94	7440-66-6	9.8	
Encapsulation	Light Metal Thermoplastic		2B 2A	Al Polyamide 66 <b>or</b>	100 100 or	7429-90-5 32131-17-2 <b>or</b>	14.9	
	Thermoplastic Filler Material Flame Retardant Inorganic solid		2A 5A Not available 4A	Polyamide 6 Fiber glass Brominated flame retardants Sb2O3	35 30 25 10	25038-54-4 65997-17-3 Not available 1309-64-4	12.6	
	Elastomer		2C	Silicon	90	68083-18-1	0.6	

Silica

Fe

Cu

Sn

Sn

Polyurathan

2D

1A

1C

1C

1C

Duromer

Iron & Steel

Heavy Metal

Heavy Metal

Heavy Metal

Termination

			Cu		0.7	7440-50-8		
Mounting Part	Iron & Steel	1A	Fe		92	7439-89-6		
	Heavy Metal	1C	Zn		8	7440-66-6	0.7	
						Sum in total:	100	
sizes [dxh]	weight range [g]		sizes [dxh]	weight range [g]			sizes [dxh] weight range [g]	
30 x 52	62		40 x 103	154			50 x 80 177	
30 x 68	65		40 x 130	179			50 x 92 209	
30 x 73	74		45 x 78	146			50 x 105 232	
30 x 93	86		45 x 83	156			50 x 132 280	
40 x 68	99		45 x 103	193			53 x 80 194	
40 x 78	113		45 x 130	232			53 x 105 302	
Not part of a Pr	oduct Class							
Contact M. Surendrababu				Important remark	(S:			

Contact	tact M. Surendrababu			Important remarks:				
Division	CAP FILM, AC, R&D			The declaration limit is 0.1% as defined by IEC 62474 (IEC PAS 61906). Traces an				
Address	s TDK India Pvt. Ltd.			product parts, substances etc. that are below a percentage of 0.1 % by weight, if not otherwise regulated				
	E 22/25, 25/1, MIDC, Satpur, N	lashik, INDIA -422007	2)	This Material Data Sheet contains typical values of the respective products set forth				
	Tel: +91 253 2205 210	mailto:lucia cabo@epcos.com		herein. We expressly point out that all values and statements contained herein are based on our best present knowledge and cannot be regarded as binding statements or binding product specifications, unless otherwise explicitly agreed in writing. TDK				
*) others: .(not declarable or prohibited substances acc. GADSL)				ELECTRONICS AG AND ITS AFFILIATES HEREBY EXPRESSLY DISCLAIM ANY				
**) typical m	ass percentage of substance		REPRESENTATION OR WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY, WITH REGARD TO THE STATEMENTS AND VALUES CONTAIL HEREIN, INCLUDING BUT NOT LIMITED TO ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR SUITABILITY FOR ANY PURPOSE					

The products set forth herein are "RoHS-compatible". RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Directive 2011/65/EU of the European Parliament and of the Council of June 8<sup>th</sup>, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



RoHS - Exemptions for t	the Product Class /	Product according to	Annex III: ( 🗹 valid 🗆 not valid )
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## ☑ no exemptions;

Exemption 6 (a): Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0,35 % lead by weight;

Exemption 6 (b): Lead as an alloying element in aluminium containing up to 0,4 % lead by weight;

Exemption 6 (c): Copper alloy containing up to 4 % lead by weight;

Exemption 7 (a): Lead in high melting temperature type solder (i.e. lead-based alloys containing 85 % by weight or more lead);

Exemption 7 (c)-I: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound;

Exemption 7 (c)-II: Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher;

Exemption 7 (c)-III: Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC;

Exemption 15: Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages;

Other Exemption than above .....