

Aluminium Electrolytic Capacitor

Material Data Sheet

Product Class	Capacitors with 4-pin / 5- pin snap-in terminals and solder pins	Remark: This material datasheet is valid for the part numbers contained in the Data Book 2019. In case of special (B4****S****) or obsolete capacitors please contact our sales department				
Date	12.05.2022					
IMDS ID if available						
Version	11	alah alah				

Product Part (IMDS: semi component)	Material Class (IMDS: Material)	Material (Classificatio n) VDA 231	Substance		TMPS**) [wt%]	CAS if applicable	typical mass of material [wt-%]	Traces see 1)
Active Part	Light Metals	1B	Aluminium		100	7429-90-5	44	
	Acids, Bases, Salts	6F	Ethylene glycol		80	107-21-1		
	Acids, Bases, Salts	6F	Othe	rs*)	20	-	- 25	
	Thermoplastics	2A	Polypropylene		100	9003-07-0	0,1	
	Paper, Cardboard	5C	Cellulose		100	9004-34-6	11,9	
Encapsulation	Light Metals	1B	Aluminium		100	7429-90-5	10	
	Paper, Cardboard	5C	Cellulose		56	9004-34-6		
	Duromer	2D	Phenolic	plastic	44	-	2,3	
	Elastomer	2B	EPDM rubber		41,5	25038-36-2		
	Inorganic, solid	4A	Silicon o	lioxide	13	7631-86-9	1,1	
	Inorganic, solid	4A	Kaoli	nite	28,5	1318-74-7		
	Lubricant	6B	Para	ffin	10,5	8012-95-1		
	-	-	Other	's *)	6,5	-		
	Thermoplastics	2A	PTFE or Polypropylene coating***)		100	9002-84-0 9003-07-0	0,2	
	Thermoplastics	2A	Polypropylene		100	9003-07-0	0,4	
	Thermoplastics	2A	Polyvinyl chloride or Polyethylene terephthalate or without insulation		90	9002-86-2 25038-59-9	3,0	
			other	·s*)	10			
Termination	Iron and Steel	1A	Iron		100	7439-89-6	2	
	Heavy Metals	1C	Copper		100	7440-50-8	<0,1	
	Heavy Metals	1C	Tir	1	100	7440-31-5	<0,1	
						Sum in total:	100	
sizes D x L [mm] 30 x 35 35 x 40 35 x 45 35 x 50 35 x 55 35 x 60 35 x 65 35 x 70 35 x 75 35 x 80 35 x 85 35 x 80	weight range [g] sizes D x L [mm] weight range [g] sizes D x 29 40 x 40 71 45 x 56 40 x 45 80 45 x 59 40 x 55 95 45 x 63 40 x 55 95 45 x 75 40 x 60 107 45 x 80 40 x 70 125 45 x 88 40 x 75 133 45 x 93 40 x 85 151 45 x 101 40 x 85 151 45 x 110 40 x 85 151 45 x 126 40 x 95 169 45 x 40 x 100 178 45 x 40 x 100 178 45 x		40 90 45 100 100 113 113 113 113 113 113 113 113	e (A) Siz	ses D x L [mm] 50 x 65 50 x 70 50 x 75 50 x 80 50 x 95 50 x 95	weight range [g] par 190 B43511/ 220 B43511/ 220 B43512/ 234 B43513/ 352 B43515/ B43516/ B43610/ B43991 B43991 B43906	B43521 B43522 B43523 B43524 B43525 B43526	
Not Part of a Pr	oduct Class							
Contact I	lvett Bálint			Important remarks:				
Division S	SZ LQM	1) The declaration limit is 0.1% as defined by IEC 62474 (IEC PAS 61906). Traces are						
	Csaba utca 30. H-9700 S	product part	product parts, substances etc. that are below a percentage of 0.1 % by weight, if not					
	Fel: +36 94 522 226	mailto: ivett.b	alint@tdk-	otherwise regulated. 2) This Material Data Sheet contains typical values of the respective products set forth herein. We expressly point out that all values and statements contained herein are				



**) typical mass percentage of substance

***) not all capacitor contains PTFE or PP coating on the cover disc

or binding product specifications, unless otherwise explicitly agreed in writing. TDK ELECTRONICS AG AND ITS AFFILIATES HEREBY EXPRESSLY DISCLAIM ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY, WITH REGARD TO THE STATEMENTS AND VALUES CONTAINED 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 8th, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

RoHS - Exemptions for the Product Class / Product according to Annex III: (☑ valid □ not valid)

 $\ \square$ 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;

 $\hfill\square$ Exemption 6 (b): Lead as an alloying element in aluminum 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)-l: 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