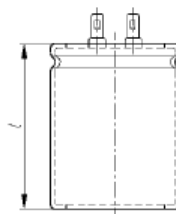


Aluminium Electrolytic Capacitor

Material Data Sheet

Product Class:	Capacitors for pulse application with solder lugs	
Date	2011.10.20	
IMDS ID if available		
Version:	06	

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	Light Metals	1B	Aluminium	100	7429-90-5	37	
	Acids, Bases, Salts	6F	Ethylene glycol	80	107-21-1	23	
	Acids, Bases, Salts	6F	Others*)	20	-		
	Thermoplastics	2A	Polypropylene	100	9003-07-0	0,2	
	Paper, Cardboard	5C	Cellulose	100	9004-34-6	15,8	
Encapsulation	Light Metals	1B	Aluminium	100	7429-90-5	10,4	
	Paper, Cardboard	5C	Cellulose	56	9004-34-6	2,8	
	Duromer	2D	Phenolic plastic	44	-		
	Elastomer	2B	EPDM rubber	100	25038-36-2	0,8	
	Thermoplastics	2A	Polyvinyl chloride or Polyethylene terephthalate	100	9002-86-2 25038-59-9	3	
Termination	Heavy Metal	1C	CuZn37	100	-	1	
	Heavy Metals	1C	Copper	100	7440-50-8	<0,1	
	Heavy Metals	1C	Tin	100	7440-31-5	<0,1	
Sum in total:						100	

sizes D x L [mm]	weight range [g]	sizes D x L [mm]	weight range [g]	sizes D x L [mm]	weight range [g]	sizes D x L [mm]	weight range [g]	part numbers
22 x 45	20	40 x 40	84	40 x 110	221	51,6 x 87	225	B43405 / B43406 / B43415
30 x 40	36	40 x 55	100	45 x 35	92	64,3 x 80,7	370	
30 x 50	46	40 x 65	125	45 x 85	203	64,3 x 105,7	440	
35 x 50	75	40 x 70	130	45 x 105	261	91 x 144,5	1200	
35 x 55	85	40 x 75	164	50 x 75	215	91 x 221	1900	
35 x 65	101	40 x 80	173	50 x 80	230			
35 x 70	116	40 x 85	182	50 x 85	260			
35 x 105	154	40 x 90	191	50 x 90	281			
35 x 110	176	40 x 105	213	50 x 100	323			

Not part of a Product Class

Contact	Dr. Ildikó Száraz	Important remarks: 1) The declaration limit is 0.1% as defined by IEC PAS 61906. Traces are product parts, substances etc. that are below a percentage of 0.1 % by weight, if not 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 based on our best present knowledge and cannot be regarded as binding statements or binding product specifications, unless otherwise explicitly agreed in writing. EPCOS 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.
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*) others:	(not declarable or prohibited substances acc. GADSL)	

****) typical mass percentage of substance**

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)

- 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