

Surge Arrester Components

Material Data Sheet

Product Class:	M59-A350XF1 B88069X3801B502
Date	10.03.2020
IMDS ID if available	
Version:	5.03

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	Ceramic	3B	Al ₂ O ₃	100	1344-28-1	20	
	Metal	1C14	Ni	42	7440-02-0	16	
		1A	Fe	58	7439-89-6	24	
Brazing ring	Metal	1D7	Ag	72	7440-22-4	1.5	
			Cu	28	7440-50-8	0.5	
Plating	Plating	1C14	Ni	100	7440-02-0	2	
Termination	Metal	1C11	Cu	95	7440-50-8	15	
		1C8	Sn	5	7440-31-5	1	
Failsafe / Cap / Disc	Clip	1C11	Cu	98	7440-50-8	14	
			Be	2	7440-41-7	0.5	
	Solder pellet	1C8	Sn	91	7440-31-5	5	
			Zn	9	7440-66-6	0.5	
Sum in total:						100	

sizes [.....]	weight range [...]
5 X 5	0.9g

Not part of a product class

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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