

## **Material Data Sheet**

Product Class:	Inrush Current Limiting B57237S*C21, B57238S*C21, B57364S*C21
Date	30.09.2019
IMDS ID if available	
Version:	5.06

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	Ceramic	3В	Mn3O4 NiO Co3O4 others*)	64 17 15 4	1317-35-7 1313-99-1 1308-06-1	63	
Termination	Composite	4D	Ag	95	7440-22-4	1	
			Glass frit (boro-silicate)	5			
Solder	Heavy Metal	1C15	Pb +) Ag Sn	97,5 1,5 1	7439-92-1 7440-22-4 7440-31-5	6	
Leads	Heavy Metal	1C12	Cu	100	7440-50-8	21	
	Heavy Metal	1C8	Sn	100	7440-31-5	1	
Encapsulation	Organic solid	4B	SiO2 Silicone C.I. Pigment black 28 others*)	82,5 9 6 2,5	60676-86-0 67763-03-5 68186-91-4	8	
	•	·	•		Sum in total:	100	•

sizes [ mm]	weight range [g]	material numbers	sizes [mm] weight range		e[g]	material numbers					
54 x 15 x 7	1.1 – 3.3	B57237S* C21	60 x 21 x 7	3.0 - 5.6		B57364S* C21					
55 x 16 x 7	2.0 - 4.1	B57238S* C21									
Not part of	a Product Class										
Contact	Mr. Christoph Ronner				Important remarks:						
Division	PPD Q QM				1)	product parts, substances etc. that are below a percentage of 0.1 % by weight, if not					
Address	8530 Deutschlandsberg, AUSTRIA										
	Tel: +43 3462 800 2139	2139 mailto: functional.ppd-eqpm.db@tdk-electronics.tdk.com			2)	otherwise regulated. This Material Data Sheet contains typical values of the respective products set forth					
*) others: .(n	ot declarable or proh	ibited substances a	acc. GADSL)		1	herein. We expressly point out that all values and statements contained herein are					
**) typical m	ass percentage of su	bstance				based on our best present knowledge and cannot be regarded as binding statements or binding product specifications, unless otherwise explicitly agreed in writing. TDK					
+) listed in th	e Candidate list of S	ubstances of Verv	High Concern a	acc to		ELECTRONICS AG AND ITS AFFILIATES HEREBY EXPRESSLY DISCLAIM ANY					
,			ingir concomt	200.10		REPRESENTATION OR WARRANTY, WHETHER EXPRESS, IMPLIED OR					
Regulation	907/2006/EC					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 produc	ts set forth herein a	ire "RoHS-compation of the text of	ible". RoHS-con	npatible means t	that pr	roducts are compatible with the requirements according to Art. 4 (substance restrictions)					
	11/65/EU of the Europe	an Parliament and of	the Council of Ju	ne 8 <sup>th</sup> , 2011 on	the re	striction of the use of certain hazardous substances in electrical and electronic					
equipment.											
RoHS - Exe	mptions for the Pro	duct Class / Prod	uct according	to Annex III: (	( 🗹 va	alid 🗖 not valid)					
no exemption	ons;										
Exemption 6											
Exemption 6	6 (b): Lead as an alloying element in aluminium containing up to 0,4 % lead by weight;										
Exemption 6	Exemption 6 (c): Copper alloy containing up to 4 % lead by weight;										
EX 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 electro	onic components containi	ng lead in a glass or	ceramic other than	n dielec	tric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound;					
Exemption 7	(c)-II: Lead in dielectric cer	amic in capacitors for a r	ated voltage of 125	V AC or 250 V DC o	or highe	er,					
Exemption 7	(c)-III: Lead in dielectric cer	amic in capacitors for a r	ated voltage of less	than 125 V AC or 2	250 V D	)C;					

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 .....

NTC