



Material Declaration Sheet

Vishay General Semiconductor - PDD

Date 28/Jul/20

Part / Product Family Details

Vishay Part Number	RoHS Compliance Status	RoHS Compliance Date Code dd-mm-yyyy	Total product Weight (gm)	Resistance value	3rd Party Lab ICP Test Report Available	Manufacturing Location	Number of Exemptions Used
B230LA-M3 to B240A-M3 B330LA-M3 to B360A-M3 B120-M3 to B160-M3 BYS10-xx-M3 BYS11-90-M3 BYS12-90-M3 SL12-M3 to SL13-M3 SS1H9-M3 to SS1H10-M3 SS12-M3 to SS16-M3 SS22S-M3 to SS24S-M3 SS25S-M3 to SS26S-M3 SSA23L-M3 to SSA24-M3 SSA33L-M3 to SSA34-M3	YES WITH EXEMPTION	01-12-2004	0.064	N/A	Yes	China	One

Technical Information: refer to <http://www.vishay.com/how/leadfree/#summary>

Terminal Plating / Grid Array Material	Terminal Base Alloy	JESD-97 Pb-Free Material Code Marking	J-STD-20D MSL Rating	Reflow Peak Process Body Temperature	Reflow Maximum number of cycles	Reflow Max. Time at Peak Temperature (sec)	Soldering Compatibility (SnPb/Pb-Free)

Material Composition

Homogenous Material Name	Material Classification	Substance Name	CAS number	Weight of Substance (gm)	With respect to Homogenous Material		% with respect to Total Product Weight	RoHS Exemptions Used
					%	ppm		
Chip	Electronics (e.g. pc boards, displays)	Silicon and others (business secret)	-	0.00125	100.00	1000000	1.95	
Lead Frame	Copper (e.g. copper amounts in cable harnesses)	Copper	7440-50-8	0.02324	100.00	1000000	36.32	
Solder 92.5	Other special metals	Lead	7439-92-1	0.00236	92.50	925000	3.69	Exemption No:7(a)
		Tin	7440-31-5	0.00013	5.00	50000	0.20	
		Silver	7440-22-4	0.00006	2.50	25000	0.10	
Encapsulation	Other duromers	Silica	60676-86-0	0.02820	80.00	800000	44.06	
		Epoxy Resin	29690-82-2	0.00356	10.00	100000	5.56	
		Phenol Resin	9003-35-4	0.00338	9.50	95000	5.28	
		Carbon Black	1333-86-4	0.00018	0.50	5000	0.28	
Surface finish	Other special metals	Tin	7440-31-5	0.00163	100.00	1000000	2.55	

EU-RoHS Directive- MCV of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and MCV of 0.01% by mass cadmium, Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

This MDS valid for
List of PN's

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

Note :- (i) All information is based on data received from our vendors & subjected to change without prior notice.
(ii) Substance weight are derived from MSDS.

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into your Design

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