



Material Declaration Sheet

Vishay General Semiconductor - PDD

Date 21/Jun/21

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
1N4001-E3 to 1N4007-E3	YES WITH EXEMPTION	01-12-2004	0.33	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)	-	0.00079	100.00	1000000	0.2394	
Lead Wire	Copper (e.g. copper amounts in cable harnesses)	Copper	7440-50-8	0.27370	100.00	1000000	82.9394	
Solder 92.5	Other special metals	Lead	7439-92-1	0.00128	92.50	925000	0.3879	Exemption No-7 a
		Tin	7440-31-5	0.00007	5.00	50000	0.0212	
		Silver	7440-22-4	0.00003	2.50	25000	0.0091	
Encapsulation	Other duromers	Silica (SiO2)	14808-60-7	0.03182	70.00	700000	9.6424	
		Epoxy resin	29690-82-2	0.00727	16.00	160000	2.2030	
		Phenolic resin	9003-35-4	0.00546	12.00	120000	1.6545	
		Antimony trioxide (Sb2O3)	1309-64-4	0.00045	1.00	10000	0.1364	
		Brominated epoxy resin	40039-93-8	0.00023	0.50	5000	0.0697	
		Carbon Black	1333-86-4	0.00023	0.50	5000	0.0697	
		Silastic	Electronics (e.g. pc boards, displays)	Hydrosilicone oil	-	0.00074	70.00	700000
Surface finish Marking	Other special metals	silica powder	-	0.00031	29.00	290000	0.0939	
		Additives	-	0.00001	1.00	10000	0.0030	
		Tin	7440-31-5	0.00756	100.00	1000000	2.2909	
		Acrylic ester oligomer	-	0.00002	35.00	350000	0.0061	
		Acrylic ester monomer A	-	0.00001	25.00	250000	0.0030	
		Acrylic ester monomer B	94108-97-1	0.00001	10.00	100000	0.0030	
Marking	Electronics (e.g. pc boards, displays)	Photo Initiator	71868-10-5	0.00000	5.00	50000	0.0000	
		Pigment	-	0.00001	24.00	240000	0.0030	
		Additives	9002-88-4	0.00000	1.00	10000	0.0000	

EU-RoHS Directive-2015/863/EU 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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