



Material Declaration Sheet

MLCC Sub-Division

Date 8/21/2013

Part / Product Family Details

Vishay Part Number	RoHS Compliance Status	RoHS Compliance Date Code dd-mmm-yyyy	Total product Weight (mg)	Value Range	3rd Party Lab ICP Test Report Available	Manufacturing Location	Number of Exemptions Used
VJ0805A471JXBA_	YES	1-Jan-1996	9.7658	470	Yes	Israel	None

Technical Information

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)
Matte Sn w/ Nickel underplate	Other	e3	NA	260 ° C	3	40	Backward & Forward

Material Composition

Homogenous Material Name	Material Classification	Substance Name	CAS number	Weight of Substance (mg)	With respect to Homogenous Material		% with respect to Total Product Weight	RoHS Exemptions Used
					%	ppm		
Electrode	Conductive paste	Palladium	5/3/7440	0.28600				
		Silver	7440-22-4	0.08580	30.00	300000	0.88	0 - None
NPO- Regular K (lead free)	Ceramic			0.20020	70.00	700000	2.05	0 - None
				8.40180				
		Praseodymium(III,IV) Oxide	12037-29-5	0.50411	6.00	60000	5.16	0 - None
		Barium Titanium Trioxide	12047-27-7	4.28492	51.00	510000	43.88	0 - None
		Dibismuth Trioxide	1304-76-3	1.34429	16.00	160000	13.77	0 - None
		Neodymium Oxide	1313-97-9	1.51232	18.00	180000	15.49	0 - None
Plating	Plating	Misc.	-	0.75616	9.00	90000	7.74	0 - None
				0.40100				
Termination	Conductive paste	Nickel	7440-02-0	0.13233	33.00	330000	1.36	0 - None
		Tin	7440-31-5	0.26867	67.00	670000	2.75	0 - None
				0.67700				
				0.64992	96.00	960000	6.66	0 - None
		Misc.	-	0.02708	4.00	40000	0.28	0 - None

EU-RoHS Directive-2011/65/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

Exemption Used NONE

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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