



Material Declaration Sheet

MLCC Sub-Division

Date 11/30/2013

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
VJ0603Y223KXBA_	YES	1-Jan-1996	6.43245	22000	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		
Dielectric X7R - High K (Lead-free)	Ceramic	Barium Titanium Trioxide	12047-27-7	5.17600	97.00	970000	78.05	0 - None
		Misc.	-	0.15528	3.00	30000	2.41	0 - None
Electrode	Conductive paste	Palladium	5/3/7440	0.24400	30.00	300000	1.14	0 - None
		Silver	7440-22-4	0.07320	70.00	700000	2.66	0 - None
Plating	Plating	Nickel	7440-02-0	0.35245	33.47	334657	1.83	0 - None
		Tin	7440-31-5	0.11795	66.53	665343	3.65	0 - None
Termination	Conductive paste	Silver	7440-22-4	0.66000	96.00	960000	9.85	0 - None
		Misc.	-	0.02640	4.00	40000	0.41	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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