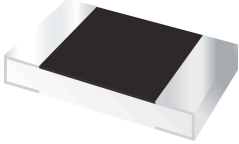


MATERIAL DECLARATION SHEET



Material Number	CG0603MLC-05E, -12E			
Product Line	ChipGuard® Automotive ESD Protectors			
Compliance Date	2013/1/4			
RoHS Compliant	Yes	MSL	1	

No.	Construction Element (subpart)	Homogeneous Material	Material weight [mg]	Homogeneous Material / Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Ceramic Body	Substrate	1.9902	Aluminum oxide	1344-28-1	100.00	85.60	85.60
		Internal Electrode	0.0558	Platinum	7440-06-4	87.46	2.10	2.40
				Silicon dioxide	7631-86-9	12.54	0.30	
		Paste	0.0933	Zinc oxide	01314-13-2	74.81	3.00	4.01
				Bismuth trioxide	1304-76-3	15.22	0.61	
				Silicon dioxide	7631-86-9	9.97	0.40	
Overcoat	0.0593	Polymer (Epoxy)	25068-38-6	100.00	2.55	2.55		
2	End Termination	Terminations	0.0581	Silver	7440-22-4	100.00	2.50	2.50
3	External electrode	Terminations External electrode	0.0683	Nickel	7440-02-0	85.07	2.50	2.94
				Tin	7440-31-5	14.93	0.44	
		Total weight	2.3250					

This Document was updated on: 2013/2/4

Important remarks: It is the responsibility of the user to verify they are accessing the latest version.