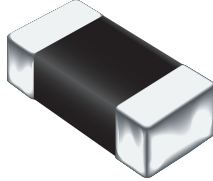


# MATERIAL DECLARATION SHEET



Material Number	CGA0603MLA Series			
Product Line	Varistor			
Compliance Date	2014/1/1			
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	Main body	3.9649	Zinc oxide	1314-13-2	100	82.55	82.55
2		Sintering Flux in Metal Oxide Layer	0.0855	Lead oxide*	1317-36-8	50	0.89	1.78
				Silicon dioxide	7631-86-9	20	0.36	
				Boron oxide*	1303-86-2	30	0.53	
3		Internal Electrode	0.3608	Silver	7440-22-4	70	5.26	7.51
				Palladium	7440-05-3	30	2.25	
4		Overcoat	0.0129	Polymer	Trade secret	100	0.27	0.27
5		Others additives in Metal Oxide Layer	0.2157	Bismuth trioxide	1304-76-3	46.55	2.09	4.49
				Manganese oxide	1317-34-6	6.68	0.30	
				Nickel oxide	1313-99-1	20.05	0.90	
	Cobalt oxide			1308-06-1	8.91	0.40		
	Antimony oxide			1309-64-4	6.68	0.30		
6	Terminations	0.1201	Silver	7440-22-4	100	2.50	2.5	
			Nickel	7440-02-0	100	0.36		
7	External electrode	0.0172	Nickel	7440-02-0	100	0.36	0.36	
		0.0259	Tin	7440-31-5	100	0.54	0.54	
		Total weight	4.803					

This Document was updated on: 2014/6/17

**Important remarks:**

1. It is the responsibility of the user to verify they are accessing the latest version.
2. \* metal oxide layer falls under glass exemption for REACH – oxides have been combined to form a glass matrix and are not present in article as individual compounds.