


MATERIAL DECLARATION & RoHS REPORT



Product Part Number	GMOV-14DxxxK			
Product Line	GMOV™ Series – 14mm Hybrid Protection Component			
MSL	1			
RoHS Compliant	Yes	Compliance Date	Feb - 2019	

No.	Construction Element (subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material\	CASRN	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)	Third Party Lab Analysis
				Substances					
1	Disk body with Silver electrode	Zinc Oxide Disc (HONGZHI)	1.39	Zinc Oxide	1314-13-2	89.00%	46.8585	52.65	Request Report
				Bismuth trioxide	1304-76-3	3.50%	1.84275		
				Diantimony trioxide	1309-64-4	2.40%	1.2636		
				Cobalt oxide	1307-96-6	1.49%	0.784485		
				Silver	7440-22-4	2.00%	1.053		
				Misc., not to declare	----	1.61%	0.847665		
2	Coater	EPOXY RESIN (PELNOX)	0.36	Poly(Bisphenol A-co-epichlorohydrin) glycidyl end-capped	25036-25-3	49.50%	6.7518	13.64	Request Report
				Silicon dioxide	60676-86-0	40.60%	5.53784		
				1,2,4-Benzenetricarboxylic anhydride	552-30-7	4.95%	0.67518		
				Titanium dioxide	13463-67-7	4.95%	0.67518		
3	Lead Wire	Tin-plated Copper Wire (HUIHUA)	0.39	Copper	7440-50-8	95.00%	14.0315	14.77	Request Report
				Tin	7440-31-5	5.00%	0.7385		

4	Solder	Soldering Bar (DAMAI)	0.04	Tin	7440-31-5	97.50%	1.47225	1.51	Request Report
				Silver	7440-22-4	2.00%	0.0302		
				Copper	7440-50-8	0.50%	0.00755		
5	Solder	Solder Paste (HUADAKANG)	0.01	Tin	7440-31-5	96.50%	0.3667	0.38	Request Report
				Silver	7440-22-4	3.00%	0.0114		
				Copper	7440-50-8	0.5%	0.0019		
6	Lateral Electrodes	Tin plated Alloy 42	0.31	Iron	7439-89-6	55.7	6.53918	11.74	Request Report
				Nickel	7440-02-0	41.8	4.90732		
				Tin	7440-31-5	2.5	0.2935		
7	Metallized Ceramic	Ceramic	0.10	Aluminum oxide	1344-28-1	91.37	3.4629	3.79	Request Report
		Metallization		Silicon dioxide	7631-86-9	4.81	0.1823		
				Tungsten	7440-33-7	3.01	0.1141		
				Nickel	7440-02-0	0.81	0.0307		
8	Brazing material	Cusil™	0.03	Silver	7440-22-4	72.00	0.8208	1.14	Request Report
				Copper	7440-50-8	28.00	0.3192		
9	Filler material	Gas	<0.01	Argon	7440-37-1	100	0.38	0.38	Request Report
TOTAL			2.64						

This Document was updated on: April, 2019

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. Presented data corresponds to part number GMOV-20D171K, weight may change depending on GMOV value and size configuration.