


MATERIAL DECLARATION



Product Part Number	ZV Through-Hole Series	
Product Line	Low voltage TH varistors	

No.	Construction Element (subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material / Substances	CASRN if applicable	Material Mass [%]	Material Mass [%] of total unit wt.	Subpart mass of total wt. [%]
1	Ceramic body	Ceramic	0.0566	Zinc oxide	1314-13-2	91.0	18.2851	20.0935
				Dibismuth-trioxide	1304-76-3	3.0	0.6028	
				Antimonytrioxide	1309-64-4	3.0	0.6028	
				Tricobalt tetraoxide	1308-06-1	1.5	0.3014	
				Chromium(III)oxide	1308-38-9	0.9	0.1708	
				Trimanganese tetraoxide	1317-35-7	0.7	0.1306	
2	Inner electrodes	AgPd alloy	0.0007	Silver	7440-22-4	90	0.2200	0.2444
				Palladium	7440-05-3	10	0.0244	
3	Ag termination	Silver	0.0009	Silver	7440-22-4	98	0.3252	0.3318
				Additives not to declare	N/A	2	0.0066	
4	Solder	Solder SAC	0.0178	Tin	7440-31-5	95.5	6.0359	6.3204
				Silver	7440-22-4	3.8	0.2402	
				Copper	7440-50-8	0.7	0.0442	
5	Wire contacts	Tin plated copper wire	0.1744	Copper	7440-50-8	99	61.3057	61.9250
				Tin	7440-31-5	1	0.6192	
6	Epoxy coating	Epoxy resin	0.0312	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis(oxirane)	25036-25-3	39.42	4.3697	11.0849
				Silica, vitreous	60676-86-0	27.21	3.0162	

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				Formaldehyde, polymer with (chloromethyl)oxirane and phenol, reaction products with 6H-dibenz(c,e)(1,2)oxaphosphorin 6-oxide	300371-38-4	17.21	1.9077	
				Benzene-1,2:4,5-tetracarboxylic dianhydride	89-32-7	8.83	0.9788	
				Oxalic acid, copper(2+) salt (1:1)	814-91-5	7.33	0.8125	
			Total weight	0.2816				

This Document was updated on: July, 2021

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. Presented data corresponds to part **ZV30K7BL1**. Weight may change depending on varistor value, dimension and lead configuration.