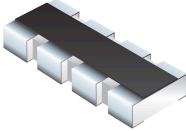


# MATERIAL DECLARATION SHEET



Material Number	CAY06-J4AS Series			
Product Line	Chip Resistor			
Compliance Date	11/19/2015			
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 substrate	Alumina	0.894	Magnesium oxide	1309-48-4	1.3	1.09746	84.42
				Crystalline silica	14808-60-7	3.0	2.5326	
				Aluminum oxide	1344-28-1	95.0	80.199	
				Calcium oxide	1305-78-8	0.7	0.59094	
2	Rear electrode	Ag glass	0.008	Lead	7439-92-1	5.0	0.038	0.76
				Boron	7440-42-8	1.0	0.0076	
				Cupric oxide	1317-38-0	5.0	0.038	
				Silver	7440-22-4	85.0	0.646	
				Crystalline silica	14808-60-7	4.0	0.0304	
3	Surface electrode	AgPd glass	0.016	Lead	7439-92-1	2.0	0.0302	1.51
				Boron	7440-42-8	1.0	0.0151	
				Palladium	7440-05-3	21.0	0.3171	
				Silver	7440-22-4	73.0	1.1023	
				Crystalline silica	14808-60-7	2.0	0.0302	
				Zirconium oxide	1314-23-4	1.0	0.0151	
4	Resistance Element	RuO2 glass	0.030	Lead	7439-92-1	26.0	0.7358	2.83
				Boron	7440-42-8	4.0	0.1132	
				Palladium	7440-05-3	7.0	0.1981	
				Silver	7440-22-4	38.0	1.0754	
				Crystalline silica	14808-60-7	9.0	0.2547	
				Manganese oxide	1313-13-9	1.0	0.0283	
				Ruthenium oxide	12036-10-1	15.0	0.4245	
5	Protective Coat 1	Glass	0.019	Lead	7439-92-1	50.0	0.4475	1.79
				Boron	7440-42-8	10.0	0.179	
				Crystalline silica	14808-60-7	37.0	0.6623	
				Chromium oxide	1308-38-9	3.0	0.0537	

# MATERIAL DECLARATION SHEET



6	Protective Coat 2	Resin	0.019	Crystalline silica	14808-60-7	35.0	0.6265	1.79
				Epoxy resin	Proprietary	65.0	1.1635	
7	Side electrode	Resin	0.002	Silver	7440-22-4	85.0	0.1615	0.19
				Epoxy resin	Proprietary	15.0	0.0285	
8	Internal coating	Nickel	0.035	Nickel	7440-02-0	99.75	3.3017	3.31
				Misc., not to declare	N/A	0.25	0.0083	
9	External coating	Tin	0.036	Tin	7440-31-5	99.75	3.3915	3.40
				Misc., not to declare	N/A	0.25	0.0085	
Total weight			1.059					

**This Document was updated on:** January 5, 2017

**Important remarks:**

1. It is the responsibility of the user to verify they are accessing the latest version.