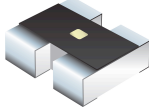


MATERIAL DECLARATION SHEET



Material Number	CAY10-J2AS 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	0.920	Magnesium oxide	1309-48-4	1.3	1.0843	83.4089
				Crystalline silica	14808-60-7	3.0	2.5023	
				Aluminum oxide	1344-28-1	95.0	79.2384	
				Calcium oxide	1305-78-8	0.7	0.5839	
2	Rear electrode	Ag glass	0.012	Lead	7439-92-1	5.0	0.0544	1.0879
				Boron	7440-42-8	1.0	0.0109	
				Cupric oxide	1317-38-0	5.0	0.0544	
				Silver	7440-22-4	85.0	0.9247	
				Crystalline silica	14808-60-7	4.0	0.0435	
3	Surface electrode	AgPd glass	0.024	Lead	7439-92-1	2.0	0.0435	2.1759
				Boron	7440-42-8	1.0	0.0218	
				Palladium	7440-05-3	21.0	0.4569	
				Silver	7440-22-4	73.0	1.5884	
				Crystalline silica	14808-60-7	2.0	0.0435	
				Zirconium oxide	1314-23-4	1.0	0.0218	
4	Resistance Element	RuO2 glass	0.015	Lead	7439-92-1	26.0	0.03536	1.3599
				Boron	7440-42-8	4.0	0.0544	
				Palladium	7440-05-3	7.0	0.0952	
				Silver	7440-22-4	38.0	0.5168	
				Crystalline silica	14808-60-7	9.0	0.1224	
				Manganese oxide	1313-13-9	1.0	0.0136	
				Ruthenium oxide	12036-10-1	15.0	0.2039	
5	Protective Coat 1	Glass	0.015	Lead	7439-92-1	50.0	0.6799	1.3599
				Boron	7440-42-8	10.0	0.1360	
				Crystalline silica	14808-60-7	37.0	0.5032	
				Chromium oxide	1308-38-9	3.0	0.0408	

MATERIAL DECLARATION SHEET



6	Protective Coat 2	Resin	0.016	Crystalline silica	14808-60-7	35.0	0.5077	1.4506
				Epoxy resin	Proprietary	65.0	0.9429	
7	Stamp	Resin	0.002	Nickel	7440-02-0	4.0	0.0072	0.1813
				Crystalline silica	14808-60-7	22.0	0.0399	
				Titanium dioxide	13463-67-7	22.0	0.0399	
				Epoxy resin	Proprietary	52.0	0.0943	
8	Side electrode	Resin	0.027	Silver	7440-22-4	85.0	2.0807	2.4479
				Epoxy resin	Proprietary	15.0	0.3672	
9	Internal coating	Nickel	0.037	Nickel	7440-02-0	99.75	3.3461	3.3545
				Misc., not to declare	N/A	0.25	0.0084	
10	External coating	Tin	0.035	Tin	7440-31-5	99.75	3.1623	3.1732
				Misc., not to declare	N/A	0.25	0.0079	
Total weight			1.103					

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.