

Material Data Sheet

Date : May/23/2011
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Product P/N	ERJ1TRQF@@@U		
Product Classification	Electric/Electronic component(Passive component)		
Product Name	Chip Resistor	Substitute P/N	No
Pb	Pb free	Packaging Material	Not included
		Weight TOTAL(mg)	40.9354

Part Name	Material Name	Chemical Name	CASNo.	Remark	Weight of each chemical material in a part (mg)	Weight of a part(mg)	Rate of each chemical material in a part(%)	Rate of each chemical material in a product(wt%)	Rate of each part in a product(wt%)	
Substrate	Ceramics	Aluminum oxide : Alumina; Corundum; Al2O3	1344-28-1		34.5828	35.8	96.6	87.45489	84.481421	
		Silica; Silicon dioxide	7631-86-9		2.1		1.836554			
		Magnesium oxide; MgO	1309-48-4		0.358		0.87455			
		Calcium oxide; CaO	1305-78-8		0.1074		0.262365			
Top Terminal	Other special metals	Silver; Ag	7440-22-4		0.210029	0.21675	96.899191	0.5295	0.51308	
		Palladium; Pd	7440-05-3		0.002818		1.300116		0.006884	
	Glass	Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monooxide; Lead(2+) oxide	1317-36-8		0.001951		0.900116		0.004766	
		Cupric oxide; CuO	1317-38-0		0.001301		0.600231		0.003179	
Bottom Terminal	Other special metals	Silver; Ag	7631-86-9		0.000651	0.34006	0.300346	0.830729	0.001591	
		Silver; Ag	7440-22-4		0.331558		97.499852		0.809958	
	Glass	Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monooxide; Lead(2+) oxide	1317-36-8		0.005101		1.50003		0.012462	
		Silica; Silicon dioxide	7631-86-9		0.003401		1.000118		0.008309	
Resistive Element	Other special metals	Palladium; Pd	7440-05-3		0.288056	0.3946	72.999492	0.963966	0.70369	
		Ruthenium(IV) oxide; RuO2	12036-10-1		0.061953		15.700203		0.151344	
	Glass	Boron oxide; B2O3	1303-86-2		0.01973		5		0.048198	
		Silver; Ag	7440-22-4		0.016574		4.200203		0.040489	
First Protective Coating	Glass	Manganese dioxide; MnO2	1313-13-9		0.008287	0.17735	2.100102	0.433251	0.020245	
		Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monooxide; Lead(2+) oxide	1317-36-8		0.097541		54.999152		0.238286	
		Silica; Silicon dioxide	7631-86-9		0.045402		25.600226		0.110912	
		Boron oxide; B2O3	1303-86-2		0.022879		12.90048		0.055891	
Second Protective Coating	EP (Epoxy resin)	Zinc oxide; ZnO	1314-13-2		0.007449	0.00768	4.20017	0.018765	0.018197	
		Chromium(III) oxide; Pigment green 17 (C.I.); Cr2O3	1308-38-9		0.004079		2.299972		0.009965	
		EP (Epoxy resin)	29690-82-2		0.680981		68.999928		2.41095	1.663554
		Ceramics	7631-86-9		0.226994		23.000011		0.554518	
Marking 1	Others (Powder, etc)	Carbon black; C	1333-86-4		0.078955	0.00768	8.000061	0.018765	0.192878	
		EP (Epoxy resin)	29690-82-2		0.004684		60.989582		0.011445	
	Ceramics	Epichlorohydrin, o-cresol, formaldehyde polymer; Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	7631-86-9		0.002343		30.507813		0.005724	
		Silica; Silicon dioxide	13463-67-7		0.000653		8.502605		0.001596	
Side Terminal	Other special metals	Titanium dioxide; Pigment white 6; TiO2	13463-67-7		0.000653	0.1545	8.502605	0.377432	0.001596	
		Silver; Ag	7440-22-4		0.073695		47.699028		0.180033	
	EP (Epoxy resin)	Bisphenol A, epichlorohydrin polymer; Epoxy resin; Epon 820; Araldite GY 250	25068-38-6		0.064427		41.700324		0.157388	
		Carbon black; C	1333-86-4		0.009116		5.900324		0.02227	
Middle Terminal (cu)	Other nonferrous metals	Potassium titanate; Potassium titanium oxide; K2Ti6O13	12056-51-8		0.007262	4.700324	0.017741			
		Copper; Cu	7440-50-8		1.1935	1.1935	100	2.915572	2.915572	
Middle Terminal (ni)	Nickel and Nickel alloys	Nickel; Ni	7440-02-0		0.9	0.9	100	2.198588	2.198588	
Outer Terminal (sn)	Other nonferrous metals	Tin; Sn	7440-31-5		0.764	0.764	100	1.866357	1.866357	