

Material Data Sheet

Date : Oct/21/2010
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Product P/N	ERT12SF0000U		
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) 25.1395

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		22.0248	22.8	96.6	90.693937	87.610341	
		Silica; Silicon dioxide	7631-86-9		0.4788		2.1			1.904574
		Magnesium oxide; MgO	1309-48-4		0.228		1			0.90694
		Calcium oxide; CaO	1305-78-8		0.0684		0.3			0.272082
Top Terminal	Other special metals	Silver; Ag	7440-22-4		0.116006	0.11972	96.89776	0.476236	0.461462	
		Palladium; Pd	7440-05-3		0.001557		1.300535			0.006194
	Glass	Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-36-8		0.001078		0.900435			0.004288
		Cupric oxide; CuO	1317-38-0		0.000719		0.600568			0.00286
		Silica; Silicon dioxide	7631-86-9		0.00036		0.300702			0.001432
Bottom Terminal	Other special metals	Silver; Ag	7440-22-4		0.162453	0.16662	97.499098	0.662791	0.646215	
		Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-36-8		0.0025		1.500421			0.009945
Resistive Element	Glass	Silica; Silicon dioxide	7631-86-9		0.001667	0.13716	1.000481	0.545606	0.240065	
		Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-36-8		0.060349		43.998978			0.208422
		Ruthenium(IV) oxide; RuO2	12036-10-1		0.052396		38.200642			0.08184
		Boron oxide; B2O3	1303-86-2		0.020574		15			0.010203
		Other antimony compounds	---		0.002565		1.870079			0.005076
		Manganese dioxide; MnO2	1313-13-9		0.001276		0.930301			0.000000
First Protective Coating	Glass	Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-36-8		0.047892	0.08708	54.997702	0.346397	0.190513	
		Silica; Silicon dioxide	7631-86-9		0.022293		25.600598			0.088678
		Boron oxide; B2O3	1303-86-2		0.011234		12.900781			0.044687
		Zinc oxide; ZnO	1314-13-2		0.003658		4.200735			0.014551
		Chromium(III) oxide; Pigment green 17 (C.I.); Cr2O3	1308-38-9		0.002003		2.300184			0.007968
Second Protective Coating	EP (Epoxy resin)	Epichlorohydrin, o-cresol, formaldehyde polymer; Formaldehyde, polymer with (chloromethyl)oxirane and 2-me	29690-82-2		0.300805	0.43595	68.999885	1.73413	1.196549	
		Ceramics	Silica; Silicon dioxide	7631-86-9	0.100269		23.000115			0.398851
		Others (Powder, etc)	Carbon black; C	1333-86-4	0.034876		8			0.13873
Marking 1	EP (Epoxy resin)	Epichlorohydrin, o-cresol, formaldehyde polymer; Formaldehyde, polymer with (chloromethyl)oxirane and 2-me	29690-82-2		0.005581	0.00915	60.994534	0.036402	0.022205	
		Ceramics	Silica; Silicon dioxide	7631-86-9	0.002791		30.502733			0.011102
		Others (Powder, etc)	Titanium dioxide; Pigment white 6; TiO2	13463-67-7	0.000778		8.502733			0.003095
Side Terminal	Other special metals	Silver; Ag	7440-22-4		0.175439	0.3678	47.699564	1.463048	0.697871	
		EP (Epoxy resin)	Bisphenol A, epichlorohydrin polymer; Epoxy resin; Epon 820; Araldite GY 250	25068-38-6	0.153373		41.700109			0.610089
	Others (Powder, etc)	Carbon black; C	1333-86-4	0.021701	5.900218		0.086323			
		Other nonferrous metal	Potassium titanate; Potassium titanium oxide; K2Ti6O13	12056-51-8	0.017287		4.700109			0.068765
Middle Terminal	Nickel and Nickel alloy	Nickel; Ni	7440-02-0		0.514	0.514	100	2.044593	2.044593	
Outer Terminal	Other nonferrous metal	Tin; Sn	7440-31-5		0.502	0.502	100	1.99686	1.99686	