

Material Data Sheet

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Product P/N	ERISENF0000V				
Product Classification	Electric/Electronic component(Passive component)				
Product Name	Chip Resistor	Substitute P/N	No	Weight TOTAL(mg)	9.49487
Pb	Pb free	Packaging Material	Not included		

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		8.1144	8.4	96.6	88.468676	85.460734	
			Silica; Silicon dioxide	7631-86-9		0.1764		2.1		1.857846	
			Magnesium oxide; MgO	1309-48-4		0.084		1		0.884689	
			Calcium oxide; CaO	1305-78-8		0.0252		0.3		0.265407	
Top Terminal	Other special metals		Silver; Ag	7440-22-4		0.064	0.06605	96.89629	0.695672	0.67408	
			Palladium; Pd	7440-05-3		0.000859		1.30053		0.009047	
	Glass		Lead(II) oxide; Lead oxide (PbO) RoHS exemption 7c(1)	1317-36-8		0.000595		0.900833		0.006267	
			Cupric oxide; CuO	1317-38-0		0.000397		0.60106		0.004182	
Bottom Terminal	Other special metals		Silica; Silicon dioxide	7631-86-9		0.000199	0.04984	0.301287	0.524927	0.002096	
			Silver; Ag	7440-22-4		0.048593		97.497993		0.511793	
	Glass		Lead(II) oxide; Lead oxide (PbO) RoHS exemption 7c(1)	1317-36-8		0.000748		1.500803		0.007878	
			Silica; Silicon dioxide	7631-86-9		0.000499		1.001204		0.005256	
Resistive Element	Glass		Lead(II) oxide; Lead oxide (PbO) RoHS exemption 7c(1)	1317-36-8		0.01102	0.02505	43.992015	0.26385	0.116084	
			Ruthenium(IV) oxide; RuO2	12036-10-1		0.00957		38.203593		0.100792	
			Boron oxide; B2O3	1303-86-2		0.003758		15.001996		0.03958	
			Other antimony compounds	-		0.000469		1.872256		0.00494	
			Manganese dioxide; MnO2	1313-13-9		0.000233		0.93014		0.002454	
First Protective Coating	Glass		Lead(II) oxide; Lead oxide (PbO) RoHS exemption 7c(1)	1317-36-8		0.019578	0.0356	54.99438	0.374962	0.206217	
			Silica; Silicon dioxide	7631-86-9		0.009114		25.601124		0.095989	
			Boron oxide; B2O3	1303-86-2		0.004593		12.901686		0.048374	
			Zinc oxide; ZnO	1314-13-2		0.001496		4.202248		0.015756	
			Chromium(III) oxide; Pigment green 17 (C.I.); Cr2O3	1308-38-9		0.000819		2.300562		0.008626	
Second Protective Coating	EP (Epoxy resin)		Epichlorohydrin, o-cresol, formaldehyde polymer; Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2		0.069889	0.10129	68.998913	1.066809	0.736093	
			Ceramics	Silica; Silicon dioxide	7631-86-9			0.023297		23.000297	0.245364
			Others (Powder, etc)	Carbon black; C	1333-86-4			0.008104		8.00079	0.085352
Marking 1	EP (Epoxy resin)		Epichlorohydrin, o-cresol, formaldehyde polymer; Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2		0.002488	0.00408	60.980392	0.042983	0.026215	
			Ceramics	Silica; Silicon dioxide	7631-86-9			0.001245		30.514706	0.013113
			Others (Powder, etc)	Titanium dioxide; Pigment white 6; TiO2	13463-67-7			0.000347		8.504902	0.003655
Side Terminal	Other special metals		Silver; Ag	7440-22-4		0.102534	0.21496	47.699105	2.263983	1.07991	
			EP (Epoxy resin)	Bisphenol A, epichlorohydrin polymer; Epoxy resin; Epon 820; Araldite	25068-38-6			0.089639		41.700317	0.944079
	Others (Powder, etc)		Carbon black; C	1333-86-4		0.012683		5.900168		0.133578	
			Other nonferrous metal	Potassium titanate; Potassium titanium oxide; K2Ti6O13	12056-51-8			0.010104		4.70041	0.106416
Middle Terminal		Nickel and Nickel alloy	Nickel; Ni	7440-02-0		0.333	0.333	100	3.507157	3.507157	
Outer Terminal		Other nonferrous metal	Tin; Sn	7440-31-5		0.265	0.265	100	2.790981	2.790981	

RoHS exemption 7c(1)

Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound