

Material Data Sheet

Date : Jul/25/2011  
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Product P/N	ER04A2200W		Electric/Electronic component/Passive component	Weight TOTAL (mg)	4,91187
Product Classification					
Product Name	Metal Film Chip Resistor	Substitute P/N	No		
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 (%)	Rate of each part in a product (%)
Substrate	Ceramics	Aluminum oxide ; Alumina; Corundum; Al2O3	1344-28-1		4,1338	4.3	96.0	87.342705	84.36032
		Silicon; Silicon dioxide	7811-86-9		0.0905				
		Magnesium oxide; MgO	1399-48-4		0.043				
Top Terminal	Gold	Calcium oxide; CaO	1395-78-8		0.0129	0.0014	98.632850	0.028524	0.028130
		Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	7440-17-3		0.00181				
		Barium oxide; BaO	1317-35-8		0.00013				
		Other special metals	7440-50-2		0.00006				
		Other non ferrous metals	7440-22-4		0.023791				
Bottom Terminal	Other special metals	Bisphenol A, epichlorohydrin polymer; Epoxy resin; Epon 820; Araldite GY 230	25068-38-6		0.014328	0.02863	83.098148	0.582805	0.484378
		Nickel and Nickel alloys	7440-02-0		0.000304				
		Other non ferrous metals	7440-17-3		0.000404				
		Brought aluminum alloys	7429-90-3		0.000094				
		Other non ferrous metals	7440-71-3		0.000099				
Resistive Element	Silver; Ag	Other special metals	7440-22-4		0.017373	0.02115	83.096920	0.43061	0.35782
		Other non ferrous metals	7440-22-4		0.017373				
		Other special metals	7440-22-4		0.017373				
		Other non ferrous metals	7440-22-4		0.017373				
		Other special metals	7440-22-4		0.017373				
Overcoat	Epoxy resin	Bisphenol A, epichlorohydrin polymer; Epoxy resin; Epon 820; Araldite GY 230	25068-38-6		0.037333	0.04438	16.460374	0.907682	0.073783
		Epoxy resin	7440-02-0		0.014328				
		Ceramics	68070-83-0		0.009897				
		Others (Powder, etc)	68180-91-4		0.003656				
		Other thermoplastics	133-88-4		0.002007				
		(This code cannot be used) Others	14801-91-6		0.002007				
		Other thermoplastics	1304-76-3		1.200023				
		Other thermoplastics	10361-44-1		0.000999				
		Other thermoplastics	26099-28-2		0.001403				
		Other thermoplastics	14801-91-6		0.002007				
Marking 1	Epoxy resin	Bisphenol A, epichlorohydrin polymer; Formaldehyde polymer; Formaldehyde polymer with (chloromethyl)hexane and 2-methylphenol	25068-38-6		0.001403	0.0028	50.107141	0.05707	0.028623
		Other thermoplastics	14801-91-6		0.002007				
		Others (Powder, etc)	13461-07-7		0.000527				
		Other thermoplastics	471-34-1		0.000107				
		Other thermoplastics	1304-76-3		0.000631				
Side Terminal	Silver; Ag	Bismuth trioxide; Bi2O3	1304-76-3		1.200023	0.0824	0.321429	1.677501	0.00182
		Other special metals	10361-44-1		0.000999				
		Other special metals	7440-22-4		0.039204				
		Other special metals	25068-38-6		0.034261				
		Other special metals	133-88-4		0.004862				
Middle Terminal	Other non ferrous metals	Potassium titanate; Potassium titanium oxide; K2Ti6O13	12056-51-8		0.003873	0.23	4.700243	5.088712	5.088712
		Nickel and Nickel alloys	7440-02-0		0.23				
		Other non ferrous metals	7440-31-5		0.18				
Outer Terminal	Other non ferrous metals	Nickel; Ni	7440-02-0		0.23	0.23	100	5.088712	5.088712
		Other non ferrous metals	7440-31-5		0.18				