

# Material Data Sheet

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Product P/N	ERJS06F###V				
Product Classification	Electric/Electronic component(Passive component)				
Product Name	Chip resistor	Substitute P/N	Na	Weight TOTAL(mg)	4.84905
Ph	Ph 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		
Substrate	Ceramics	Aluminum oxide; Alumina; Corundum; Al2O3	1344-28-1		4.0379	4.2	96.8	86.632907	83.686991		
		Silica; Silicon dioxide	7631-86-9		0.0882		2.1		1.819289		
		Magnesium oxide; MgO	1309-49-4		0.042		1		0.866328		
		Calcium oxide; CaO	1305-78-8		0.0126		0.3		0.258989		
Top Terminal	Gold	Gold; Au	7440-57-5		0.03251	0.03444	94.39605	0.710432	0.670621		
		Lead(II) oxide; Lead oxide (PbO); Cl. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-39-8		0.001309		3.800813		0.027001		
	RoHS exemption	Glass	Quartz oxide; SiO2	1317-39-8			0.000414		1.202091	0.003554	
	Boron oxide; B2O3	1303-86-2		0.000207	0.601046		0.00427				
Re-top Terminal	Other special metals	Silver; Ag	7440-22-4		0.028835	0.0347	83.97982	0.715773	0.594796		
	EP (Epoxy resin)	Bisphenol A, epichlorohydrin polymer; Epoxy resin; Epon 820; Araldite GY 250	25068-38-6		0.005865		16.902018		0.120977		
Bottom Terminal	Other special metals	Silver; Ag	7440-22-4		0.027845	0.02856	97.496498	0.589125	0.574376		
		RoHS exemption	Glass	Lead(II) oxide; Lead oxide (PbO); Cl. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-39-8				0.000429	1.502101	0.006949
	Silica; Silicon dioxide	7631-86-9		0.000268	1.001401		0.0059				
	Lead(II) oxide; Lead oxide (PbO); Cl. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-39-8		0.004997	43.987675		0.234365		0.103114		
Resistive Element	RoHS exemption	Glass	Ruthenium (IV) oxide; RuO2	12036-10-1		0.00434	0.01136	38.204226	0.688521	0.088521	
			Boron oxide; B2O3	1303-86-2		0.001704		1.5		0.035149	
			Other antimony compounds	-		0.000213		1.875		0.004394	
			Manganese dioxide; MnO2	1313-13-9		0.000106		0.833099		0.002187	
			Lead(II) oxide; Lead oxide (PbO); Cl. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide	1317-39-8		0.009832		54.988813		0.368852	0.202845
			Silica; Silicon dioxide	7631-86-9		0.004578		25.604027		0.9443	
			Boron oxide; B2O3	1303-86-2		0.002207		12.902685		0.647587	
			Zinc oxide; ZnO	1314-13-2		0.000751		4.200224		0.015491	
			Chromium(III) oxide; Pigment green 17 (C1); Cr2O3	1309-36-9		0.000412		2.304251		0.008499	
			Silica; Silicon dioxide	7631-86-9		0.027325		67.469135		0.835409	0.56385
Second Protective Coating	Ceramics	Epichlorohydrin, o-cresol, formaldehyde polymer; Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29890-82-2		0.012199	0.0405	30.240988	0.835409	0.251627		
		Others (Powder,etc)	Carbon black; C	1333-86-4			0.000976		2.409877	0.020132	
		EP (Epoxy resin)	Epichlorohydrin, o-cresol, formaldehyde polymer; Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29890-82-2			0.001291		46.272401	0.02665	
		Ceramics	Kaolin; Aluminum silicate hydrate	1332-592-7			0.00065		23.297491	0.013408	
Marking 1	Ceramics	Silica; Silicon dioxide	7631-86-9		0.000182	0.00279	6.523298	0.003754	0.003754		
		Others (Powder,etc)	Titanium dioxide; Pigment white 6; TiO2	13463-67-7			0.00065		23.297491	0.013408	
		Copper phthalocyanine; Phthalocyanine copper; Phthalocyanine blue; Pigment blue 15	147-14-8		0.000017		0.609319		0.000351		
		Other special metals	Silver; Ag	7440-22-4			0.047136		47.698845	2.038389	0.972309
		EP (Epoxy resin)	Bisphenol A, epichlorohydrin polymer; Epoxy resin; Epon 820; Araldite GY 250	25068-38-6			0.041208		41.700061	0.849992	
		Others (Powder,etc)	Carbon black; C	1333-86-4			0.005831		5.900828	0.120276	
Middle Terminal	Other nonferrous metals	Potassium titanate; Potassium titanium oxide; K2Ti6O13	12059-51-8		0.004445	0.223	4.700468	4.599788	0.025122		
		Nickel and Nickel alloys	Nickel; Ni	7440-02-0			0.223		100	4.599788	
Outer Terminal	Other nonferrous metals	Tin; Sn	7440-31-5		0.158	0.158	100	3.217789	3.217789		

RoHS exemption 7e(1)  
 Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound