

Material Data Sheet

December.18.2008
Panasonic Electronic Devices Co.,Ltd.
Circuit Components Business Unit
Engineering & Quality Planning Group
Environment Management Team
Person in charge:Kieko Hosoi

Product P/N	EXB2HV@@@JV			Product Weight(mg)	8,632.1
Part Name	Material Name	Chemical Name	CASNo.	Weight of each chemical material in	Weight of a part(mg)
substrate	Alumina(Al ₂ O ₃)	Aluminum oxide ; Al ₂ O ₃	1344-28-1	7.514514	7.779
	Silica(SiO ₂)	Silica; Silicon dioxide	7631-86-9	0.163359	
	Others (Ceramic)	Magnesium oxide; MgO	1309-48-4	0.07779	
		Calcium oxide; CaO	1305-78-8	0.023337	
top terminal	Ag(silver) and Ag alloy	Silver; Ag	7440-22-4	0.073644	0.076
	Pd(Palladium) and Pd alloy	Palladium; Pd	7440-05-3	0.000988	
	Lead glass	Lead(II) oxide; PbO	1317-36-8	0.000684	
	Others (Glass)	Cupric oxide; CuO	1317-38-0	0.000456	
		Silica; Silicon dioxide	7631-86-9	0.000228	
bottom terminal	Ag(silver) and Ag alloy	Silver; Ag	7440-22-4	0.020475	0.021
	Lead glass	Lead(II) oxide; PbO	1317-36-8	0.000315	
	Others (Glass)	Silica; Silicon dioxide	7631-86-9	0.00021	
Resistive element	Lead glass	Lead(II) oxide; PbO	1317-36-8	0.009855	0.0224
	Others (Glass)	Boron oxide; B ₂ O ₃	1303-86-2	0.008557	
		Ruthenium(IV) oxide; RuO ₂	12036-10-1	0.00336	
		Other antimony compounds	M-129	0.000419	
		Manganese dioxide; MnO ₂	1313-13-9	0.000209	
First protective coating	Lead glass	Lead(II) oxide; PbO	1317-36-8	0.012758	0.0232
	Others (Glass)	Silica; Silicon dioxide	7631-86-9	0.00594	
		Boron oxide; B ₂ O ₃	1303-86-2	0.002993	
		Zinc oxide; ZnO	1314-13-2	0.000975	
		Chromium(III) oxide; Cr ₂ O ₃	1308-38-9	0.000534	
Second protective coating	Others (Glass)	Aluminum silicate n-hydrate; Al ₂ (SiO ₃) ₃	12141-46-7	0.065635	0.1345
	Epoxy resin (EP)	Bromophenol, formaldehyde, epichlorohydrin polymer	6854-1-56-0	0.049227	
	Unsaturated polyester (UP)	1,3-Benzenedicarboxylic acid, polymer with 1,4-benzenedicarboxylic acid, decanedioic acid, 2,2-dimethyl-1,3-propanediol and 1,2-ethanediol	26353-05-9	0.01224	
	additives(pigment.dye(black))	Carbon black; C	1333-86-4	0.00417	
	Silica(SiO ₂)	Silica; Silicon dioxide	7631-86-9	0.003228	
side terminal	Ni(Nickel) and Ni alloy	Nickel; Ni	7440-02-0	0.07299	0.09
	Phenol-formaldehyde resin (PF)	Phenol formaldehyde resin; PF	9003-35-4	0.01269	
	additives(pigment.dye(black))	Carbon black; C	1333-86-4	0.00432	
middle terminal	Ni(Nickel) and Ni alloy	Nickel; Ni	7440-02-0	0.274	0.274
outer terminal	Sn(Tin)and Sn Alloy	Tin; Sn	7440-31-5	0.212	0.212