MATERIAL DECLARATION

CAS02 (0201)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	0.1340360	97.20%	
		Silicon Dioxide	14808-60-7	0.0024820	1.80%	
		Magnesium Oxide	1309-48-4	0.0011030	0.80%	
		Calcium Oxide	1305-78-8	0.0002760	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.0036770	87.20%	
		Palladium	7440-05-3	0.0002700	6.40%	
		Glass	65997-17-3	0.0002700	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.0017740	94.12%	
		Glass	65997-17-3	0.0001110	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.0000280	80%	
		Chromium	7440-47-3	0.0000070	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.0016530	83.33%	
		Boric Anhydride	1303-86-2	0.0003310	16.67%	
6	Resistive Element	Silver	7440-22-4	0.0008740	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.0004370	12.58%	
		Ruthenium Oxide	12036-10-1	0.0006550	18.87%	
		Glass	65997-18-4	0.0013100	37.74%	
		Copper (II) Oxide	1317-38-0	0.0000220	0.63%	
		Manganese Oxide	1317-35-7	0.0000440	1.26%	
		Niobium Oxide	1313-96-8	0.0000650	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0000650	1.88%	
7	Protective Coating (G1)	Bismuth Trioxide	1304-76-3	0.0012600	63.49%	
		Silicon Dioxide	14808-60-7	0.0006300	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0000940	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.0013740	38%	
		Silica	60676-86-0	0.0016480	46.15%	
		Talc	14807-96-6	0.0005490	15.38%	
9	Termination Between	Nickel	7440-02-0	0.0178000	100%	
10	Termination Outer	Tin	7440-31-5	0.0175200	100%	
			TOTAL	0.190365		

MATERIAL DECLARATION

CAS04 (0402)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	0.4890700	97.20%	
		Silicon Dioxide	14808-60-7	0.0090600	1.80%	
		Magnesium Oxide	1309-48-4	0.0040300	0.80%	
		Calcium Oxide	1305-78-8	0.0010100	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.0095830	87.20%	
		Palladium	7440-05-3	0.0007030	6.40%	
		Glass	65997-17-3	0.0007030	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.0055910	94.12%	
		Glass	65997-17-3	0.0003490	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.0050560	80%	
		Chromium	7440-47-3	0.0012640	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.0000580	83.33%	
		Boric Anhydride	1303-86-2	0.0000120	16.67%	
6	Resistive Element	Silver	7440-22-4	0.0014320	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.0007160	12.58%	
		Ruthenium Oxide	12036-10-1	0.0010740	18.87%	
		Glass	65997-18-4	0.0021470	37.74%	
		Copper (II) Oxide	1317-38-0	0.0000360	0.63%	
		Manganese Oxide	1317-35-7	0.0000720	1.26%	
		Niobium Oxide	1313-96-8	0.0001070	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0001070	1.88%	
7	Protective Coating (G1)	Bismuth Trioxide	1304-76-3	0.0020300	63.49%	
		Silicon Dioxide	14808-60-7	0.0010100	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0001500	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.0041400	38.47%	
		Silica	60676-86-0	0.0049600	46.15%	
		Talc	14807-96-6	0.0016500	15.38%	
9	Termination Between	Nickel	7440-02-0	0.0356000	100%	
10	Termination Outer	Tin	7440-31-5	0.0350400	100%	
			TOTAL	0.616760		

MATERIAL DECLARATION

CAS06 (0603)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	1.7862100	97.20%	
		Silicon Dioxide	14808-60-7	0.0330800	1.80%	
		Magnesium Oxide	1309-48-4	0.0147000	0.80%	
		Calcium Oxide	1305-78-8	0.0036800	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.0212300	87.20%	
		Palladium	7440-05-3	0.0015600	6.40%	
		Glass	65997-17-3	0.0015600	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.0076400	94.12%	
		Glass	65997-17-3	0.0004800	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.0169360	80%	
		Chromium	7440-47-3	0.0042340	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.0216410	83.33%	
		Boric Anhydride	1303-86-2	0.0043290	16.67%	
6	Resistive Element	Silver	7440-22-4	0.2450700	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.1225300	12.58%	
		Ruthenium Oxide	12036-10-1	0.1838000	18.87%	
		Glass	65997-18-4	0.3676000	37.74%	
		Copper (II) Oxide	1317-38-0	0.0061400	0.63%	
		Manganese Oxide	1317-35-7	0.0122700	1.26%	
		Niobium Oxide	1313-96-8	0.0183100	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0183100	1.88%	
7	Protective Coating (G1	Bismuth Trioxide	1304-76-3	0.0144300	63.49%	
		Silicon Dioxide	14808-60-7	0.0072200	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0010800	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.0181100	38.47%	
		Silica	60676-86-0	0.0217300	46.15%	
		Talc	14807-96-6	0.0072400	15.38%	
9	Termination Between	Nickel	7440-02-0	0.0747600	100%	
10	Termination Outer	Tin	7440-31-5	0.0735800	100%	
11	Marking	Epoxy Resin	25085-99-8	0.0010600	50.00%	
		Barium Sulfate	7727-43-7	0.0004200	30.00%	
		Titanium Dioxide	13463-67-7	0.0006300	20.00%	
			TOTAL	3.111570		

MATERIAL DECLARATION

CAS10 (0805)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	4.0510100	97.20%	
		Silicon Dioxide	14808-60-7	0.0750200	1.80%	
		Magnesium Oxide	1309-48-4	0.0333400	0.80%	
		Calcium Oxide	1305-78-8	0.0083400	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.0409200	87.20%	
		Palladium	7440-05-3	0.0030000	6.40%	
		Glass	65997-17-3	0.0030000	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.0147200	94.12%	
		Glass	65997-17-3	0.0009200	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.0206400	80%	
		Chromium	7440-47-3	0.0051600	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.0443230	83.33%	
		Boric Anhydride	1303-86-2	0.0088670	16.67%	
6	Resistive Element	Silver	7440-22-4	0.0063000	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.0031500	12.58%	
		Ruthenium Oxide	12036-10-1	0.0047200	18.87%	
		Glass	65997-18-4	0.0094500	37.74%	
		Copper (II) Oxide	1317-38-0	0.0001600	0.63%	
		Manganese Oxide	1317-35-7	0.0003200	1.26%	
		Niobium Oxide	1313-96-8	0.0004700	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0004700	1.88%	
7	Protective Coating (G1)	Bismuth Trioxide	1304-76-3	0.0298000	63.49%	
		Silicon Dioxide	14808-60-7	0.0149000	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0022300	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.0349100	38.47%	
		Silica	60676-86-0	0.0418800	46.15%	
		Talc	14807-96-6	0.0139600	15.38%	
9	Termination Between	Nickel	7440-02-0	0.1500000	100%	
10	Termination Outer	Tin	7440-31-5	0.1478300	100%	
11	Marking	Epoxy Resin	25085-99-8	0.0010600	50.00%	
		Barium Sulfate	7727-43-7	0.0004200	30.00%	
		Titanium Dioxide	13463-67-7	0.0006300	20.00%	
			TOTAL	4.771920		

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MATERIAL DECLARATION

CAS12 (1206)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	7.5397000	97.20%	
		Silicon Dioxide	14808-60-7	0.1396200	1.80%	
		Magnesium Oxide	1309-48-4	0.0620600	0.80%	
		Calcium Oxide	1305-78-8	0.0155100	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.0819500	87.20%	
		Palladium	7440-05-3	0.0060100	6.40%	
		Glass	65997-17-3	0.0060100	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.0294900	94.12%	
		Glass	65997-17-3	0.0018400	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.0180000	80%	
		Chromium	7440-47-3	0.0045000	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.0783140	83.33%	
		Boric Anhydride	1303-86-2	0.0156660	16.67%	
6	Resistive Element	Silver	7440-22-4	0.0110400	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.0055200	12.58%	
		Ruthenium Oxide	12036-10-1	0.0082800	18.87%	
		Glass	65997-18-4	0.0165500	37.74%	
		Copper (II) Oxide	1317-38-0	0.0002800	0.63%	
		Manganese Oxide	1317-35-7	0.0005500	1.26%	
		Niobium Oxide	1313-96-8	0.0008200	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0008200	1.88%	
7	Protective Coating (G1)	Bismuth Trioxide	1304-76-3	0.0596700	63.49%	
		Silicon Dioxide	14808-60-7	0.0298400	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0044700	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.0771300	38.47%	
		Silica	60676-86-0	0.0925300	46.15%	
		Talc	14807-96-6	0.0308400	15.38%	
9	Termination Between	Nickel	7440-02-0	0.2000300	100%	
10	Termination Outer	Tin	7440-31-5	0.1968800	100%	
11	Marking	Epoxy Resin	25085-99-8	0.0010600	50.00%	
		Barium Sulfate	7727-43-7	0.0004200	30.00%	
		Titanium Dioxide	13463-67-7	0.0006300	20.00%	
			TOTAL	8.736030		

MATERIAL DECLARATION

CAS14 (1210)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	12.8703600	97.20%	
		Silicon Dioxide	14808-60-7	0.2383400	1.80%	
		Magnesium Oxide	1309-48-4	0.1059300	0.80%	
		Calcium Oxide	1305-78-8	0.0264800	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.1292500	87.20%	
		Palladium	7440-05-3	0.0094900	6.40%	
		Glass	65997-17-3	0.0094900	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.0465000	94.12%	
		Glass	65997-17-3	0.0029100	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.0888000	80%	
		Chromium	7440-47-3	0.0222000	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.2470230	83.33%	
		Boric Anhydride	1303-86-2	0.0494170	16.67%	
6	Resistive Element	Silver	7440-22-4	0.0372900	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.0186500	12.58%	
		Ruthenium Oxide	12036-10-1	0.0279700	18.87%	
		Glass	65997-18-4	0.559400	37.74%	
		Copper (II) Oxide	1317-38-0	0.0009300	0.63%	
		Manganese Oxide	1317-35-7	0.0018700	1.26%	
		Niobium Oxide	1313-96-8	0.0027900	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0027900	1.88%	
7	Protective Coating (G1)	Bismuth Trioxide	1304-76-3	0.1003800	63.49%	
		Silicon Dioxide	14808-60-7	0.0502000	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0075300	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.1102400	38.47%	
		Silica	60676-86-0	0.1322500	46.15%	
		Talc	14807-96-6	0.0440700	15.38%	
9	Termination Between	Nickel	7440-02-0	0.3586700	100%	
10	Termination Outer	Tin	7440-31-5	0.3530280	100%	
11	Marking	Epoxy Resin	25085-99-8	0.0010600	50.00%	
		Barium Sulfate	7727-43-7	0.0004200	30.00%	
		Titanium Dioxide	13463-67-7	0.0006300	20.00%	
			TOTAL	15.152898		

MATERIAL DECLARATION

CAS20 (2010)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	21.1378800	97.20%	
		Silicon Dioxide	14808-60-7	0.3914400	1.80%	
		Magnesium Oxide	1309-48-4	0.1739700	0.80%	
		Calcium Oxide	1305-78-8	0.0434900	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.2096100	87.20%	
		Palladium	7440-05-3	0.0153800	6.40%	
		Glass	65997-17-3	0.0153800	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.0754200	94.12%	
		Glass	65997-17-3	0.0047100	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.0814400	80%	
		Chromium	7440-47-3	0.0203600	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.2670810	83.33%	
		Boric Anhydride	1303-86-2	0.0534290	16.67%	
6	Resistive Element	Silver	7440-22-4	0.0548400	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.0274200	12.58%	
		Ruthenium Oxide	12036-10-1	0.0411300	18.87%	
		Glass	65997-18-4	0.0822500	37.74%	
		Copper (II) Oxide	1317-38-0	0.0013700	0.63%	
		Manganese Oxide	1317-35-7	0.0027500	1.26%	
		Niobium Oxide	1313-96-8	0.0041000	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0041000	1.88%	
7	Protective Coating (G1)	Bismuth Trioxide	1304-76-3	0.1933200	63.49%	
		Silicon Dioxide	14808-60-7	0.0966800	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0144900	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.2034500	38.47%	
		Silica	60676-86-0	0.2440600	46.15%	
		Talc	14807-96-6	0.0813400	15.38%	
9	Termination Between	Nickel	7440-02-0	0.3671250	100%	
10	Termination Outer	Tin	7440-31-5	0.3613500	100%	
11	Marking	Epoxy Resin	25085-99-8	0.0010600	50.00%	
		Barium Sulfate	7727-43-7	0.0004200	30.00%	
		Titanium Dioxide	13463-67-7	0.0006300	20.00%	
			TOTAL	24.271475		

MATERIAL DECLARATION

CAS25 (2512)

NO.	BREAKDOWN OF COMPONENT	MATERIAL NAME	CAS NO.	SUBSTANCE MASS (mg/pc)	PERCENTAGE OF HOMOGENEOUS MATERIAL	REMARK
1	Substrate	Aluminium Trioxide	1344-28-1	34.8840000	97.20%	
		Silicon Dioxide	14808-60-7	0.6460000	1.80%	
		Magnesium Oxide	1309-48-4	0.2871100	0.80%	
		Calcium Oxide	1305-78-8	0.0717800	0.20%	
2	Termination Inner (C1)	Silver	7440-22-4	0.3633400	87.20%	
		Palladium	7440-05-3	0.0266700	6.40%	
		Glass	65997-17-3	0.0266700	6.40%	
3	Termination Inner (C2)	Silver	7440-22-4	0.1307200	94.12%	
		Glass	65997-17-3	0.0081700	5.88%	
4	Termination Inner (C3)	Nickel	7440-02-0	0.1071200	80%	
		Chromium	7440-47-3	0.0267800	20%	
5	Termination Inner (C4)	Silver	7440-22-4	0.4629480	83.33%	
		Boric Anhydride	1303-86-2	0.0926120	16.67%	
6	Resistive Element	Silver	7440-22-4	0.0894600	25.16%	RoHS Exemption No.: 7(c)-I (Pb in glass of electronic components)
		Palladium	7440-05-3	0.0447300	12.58%	
		Ruthenium Oxide	12036-10-1	0.0670900	18.87%	
		Glass	65997-18-4	0.1341900	37.74%	
		Copper (II) Oxide	1317-38-0	0.0022400	0.63%	
		Manganese Oxide	1317-35-7	0.0044800	1.26%	
		Niobium Oxide	1313-96-8	0.0066800	1.88%	
		Tantalum Pentoxide	1314-61-0	0.0066800	1.88%	
7	Protective Coating (G1)	Bismuth Trioxide	1304-76-3	0.3879900	63.49%	
		Silicon Dioxide	14808-60-7	0.1940300	31.75%	
		Chromium(III) Oxide	1308-38-9	0.0290900	4.76%	
8	Protective Coating (G2)	Epoxy Resin	25068-38-6	0.3526400	38.47%	
		Silica	60676-86-0	0.4230400	46.15%	
		Talc	14807-96-6	0.1409800	15.38%	
9	Termination Between	Nickel	7440-02-0	0.4699200	100%	
10	Termination Outer	Tin	7440-31-5	0.4625280	100%	
11	Marking	Epoxy Resin	25085-99-8	0.0010600	50.00%	
		Barium Sulfate	7727-43-7	0.0004200	30.00%	
		Titanium Dioxide	13463-67-7	0.0006300	20.00%	
			TOTAL	39.951798		

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