



Semiconductor Device Type: XZX				Module-50-32x15x2.5mm-NIAu				Package Homogeneous Materials			
Basic Substance	CAS Number	% Contained in Sub-Component	% Total Weight	mg/part	ppm			(mg) Total	Capacitor A	% of Total Weight	
Capacitor A	7440-21-5	0.00	0.00	10	10				Tin	7440-51-8	1.10
Capacitor A	12013-47-7	0.07	1.32	710					Calcium zirconate	12013-47-7	16.82
Copper	7440-50-8	0.01	0.01	10					Copper	7440-50-8	7.20
Nickel	7440-02-0	0.00	0.08	46					Nickel	7440-02-0	4.20
Capacitor A	7440-21-5	0.00	0.00	30					Tin	7440-51-8	0.07
Capacitor A	12013-47-7	0.00	0.08	20					Calcium zirconate	12013-47-7	2.87
Copper	7440-50-8	0.00	0.01	3					Copper	7440-50-8	0.29
Nickel	7440-02-0	0.00	0.00	8					Nickel	7440-02-0	0.17
Capacitor A	7440-21-5	0.00	0.00	1					Tin	7440-51-8	0.08
Capacitor A	12013-47-7	0.00	0.08	36					Calcium zirconate	12013-47-7	3.13
Copper	7440-50-8	0.00	0.01	4					Copper	7440-50-8	0.34
Nickel	7440-02-0	0.00	0.00	2					Nickel	7440-02-0	0.20
Capacitor A	7440-21-5	0.00	0.01	3					Tin	7440-51-8	0.28
Capacitor A	12013-47-7	0.01	0.22	118					Calcium zirconate	12013-47-7	16.76
Copper	7440-50-8	0.00	0.02	13					Copper	7440-50-8	1.18
Nickel	7440-02-0	0.00	0.01	7					Nickel	7440-02-0	0.09
Capacitor A	12013-47-7	0.00	0.02	11					Calcium zirconate	12013-47-7	1.04
Copper	7440-50-8	0.00	0.00	1					Copper	7440-50-8	0.07
Nickel	7440-02-0	0.00	0.00	1					Nickel	7440-02-0	0.07
Barium titanate	12501-27-7	0.95	17.65	9530					Total		100.00
Tin	7440-21-5	0.13	2.45	1301					Barium titanate	12501-27-7	16.90
Copper	7440-50-8	0.18	3.35	1806				26.40	(mg) Total	Capacitor B	% of Total Weight
Nickel	7440-02-0	0.11	1.86	1086							1.37
Calcium oxide	1305-78-8	0.02	0.34	184					Tin	7440-51-8	0.63
Zincum oxide	1314-13-4	0.04	0.82	441					Copper	7440-50-8	13.17
Manganese oxide	1344-43-0	0.00	0.07	37					Nickel	7440-02-0	2.70
Trade Secret	Trade Secret	0.01	0.14	74					Total		100.00
Copper	7440-50-8	0.00	0.06	31					Capacitor C		% of Total Weight
Copper	7440-50-8	0.02	0.46	247				2.10	(mg) Total		0.11
Silicon dioxide	7631-86-9	0.00	0.04	22					Calcium oxide	1305-78-8	16.21
Diboron trioxide	7440-02-0	0.00	0.01	5					Zirconium dioxide	1314-24-4	8.91
Nickel	7440-02-0	0.00	0.05	26					Manganese oxide	1344-43-0	1.24
Tin	7440-21-5	0.01	0.13	69					Trade Secret	Trade Secret	8.49
Barium oxide	1344-38-5	0.00	0.09	172					Copper	7440-50-8	2.71
Titanium dioxide	14853-62-7	0.05	0.86	464					Copper	7440-50-8	21.81
Trade Secret	Trade Secret	0.02	0.20	105					Silicon dioxide	7631-86-9	1.94
Nickel	7440-02-0	0.01	0.10	56					Diboron trioxide	7440-02-0	0.49
Nickel	7440-02-0	0.00	0.00	40					Nickel	7440-02-0	2.14
Silicon dioxide	7631-86-9	0.00	0.08	43					Tin	7440-51-8	6.05
Copper	7440-50-8	0.05	0.89	463					Total		100.00
Diboron trioxide	1303-86-2	0.00	0.02	11					Capacitor D		% of Total Weight
Capacitor D	7440-21-5	0.01	0.25	134				4.30	(mg) Total		0.22
Capacitor D	7440-21-5	0.00	0.05	26					Barium oxide	1304-28-5	40.00
Resistor	29006-38-6	0.00	0.05	26					Titanium dioxide	1346-07-7	20.00
Resistor	65997-19-4	0.00	0.00	2					Trade Secret	Trade Secret	0.07
Quartz	14808-60-7	0.00	0.03	16					Nickel	7440-02-0	2.42
Tin	7440-21-5	0.01	0.11	59					Nickel	7440-02-0	2.12
Nickel	7440-02-0	0.01	0.20	107					Silicon dioxide	7631-86-9	1.94
Aluminum oxide	1344-28-1	0.09	1.87	963					Copper	7440-50-8	27.07
Fiber Glass Wool	65997-17-3	0.00	0.02	9					Diboron trioxide	1303-86-2	0.49
Ruthenium dioxide	12036-10-1	0.00	0.02	9					Nickel	7440-02-0	2.12
Magnesium oxide	1309-48-4	0.00	0.03	16					Tin	7440-51-8	6.05
Resistor	7440-22-4	0.00	0.06	32					Total		100.00
Silicon dioxide	7631-86-9	0.02	0.41	219					Resistor		% of Total Weight
Aluminum oxide	1344-28-1	0.02	0.33	176				2.20	(mg) Total		0.12
Diboron trioxide	1303-86-2	0.00	0.08	44					Bisphenol A epoxy resin	25006-38-6	2.12
Silicon dioxide	7631-86-9	0.00	0.02	10					Lead Telluride	65997-18-4	0.16
Aluminum oxide	1344-28-1	0.00	0.00	1					Quartz	14808-60-7	1.98
Cobalt (II) oxide	1307-86-6	0.00	0.00	1					Tin	7440-51-8	4.93
Silicon dioxide	7631-86-9	0.00	0.03	16					Nickel	7440-02-0	0.01
Aluminum oxide	1344-28-1	0.00	0.00	1					Aluminum oxide	1344-28-1	16.20
Diboron trioxide	1303-86-2	0.00	0.01	3					Fiber Glass Wool	65997-17-3	1.12
Trade Secret	Trade Secret	0.00	0.00	1					Ruthenium dioxide	12036-10-1	0.74
Nickel	7440-02-0	0.00	0.06	31					Magnesium oxide	1309-48-4	1.98
Capacitor D	7440-21-5	0.01	0.12	63					Silver	7440-22-4	1.92
Silver	7440-22-4	0.01	0.19	98					Total		100.00
Tin	7440-21-5	0.00	0.07	36					Inductor A		% of Total Weight
Copper	7440-50-8	0.03	11.61	6266				1.30	(mg) Total		0.07
Polyurethane	8009-65-5	0.02	0.39	213					Silicon dioxide	7631-86-9	31.27
Nickel(II) oxide	1313-56-1	0.00	0.08	1690					Aluminum oxide	1344-28-1	16.20
Copper(II) oxide	1317-39-0	0.38	0.01	3744					Diboron trioxide	1303-86-2	0.25
Indium(III) oxide	5096-72-1	0.83	17.41	9208					Cobalt (II) oxide	1307-86-6	0.16
Zinc Oxide	1314-13-2	1.19	22.01	11880					Silicon dioxide	7631-86-9	2.21
1-Hydroxycyclohexyl phenyl ketone	847-19-3	0.10	1.92	1029					Cobalt (II) oxide	1307-86-6	0.16
Bisphenol A diglycidyl diacrylate	55818-57-0	0.62	11.55	6234					Silicon dioxide	7631-86-9	2.21
Tripropylene glycol diacrylate	42978-96-5	0.11	1.77	917					Aluminum oxide	1344-28-1	0.16
Silica	112945-52-5	0.00	0.05	30					Diboron trioxide	1303-86-2	0.47
1-Hydroxycyclohexyl phenyl ketone	847-19-3	0.00	0.03	15					Trade Secret	Trade Secret	0.16
Quartz	14808-60-7	0.01	0.27	148					Nickel	7440-02-0	4.38
Bisphenol A diglycidyl diacrylate	55818-57-0	0.02	0.41	222					Nickel	7440-02-0	1.69
Tripropylene glycol diacrylate	42978-96-5	0.09	1.67	902					Silver	7440-22-4	13.92
Trade Secret	Trade Secret	0.01	0.11	59					Silver	7440-22-4	13.92
Nickel	7440-02-0	0.01	0.21	111					Tin	7440-51-8	1.68
Silver	7440-22-4	0.11	2.00	1080					Total		100.00
Tin	7440-21-5	0.04	0.80	434				200.00	(mg) Total	Inductor B	% of Total Weight
Tungsten	7440-33-7	0.13	2.46	1299					Copper	7440-50-8	5.80
Molybdenum	7439-98-5	0.01	0.13	70					Polyurethane	8009-65-5	0.20
Cobalt	7440-48-4	0.03	0.65	299					Nickel(II) oxide	1313-56-1	13.04
Chromium (III) Oxide	1306-38-9	0.01	0.13	70					Copper(II) oxide	1317-39-0	0.20
Iron	7439-89-6	0.08	1.57	847					Iron(III) oxide	1346-37-1	33.06
Gold	7440-17-5	0.00	0.03	16					Zinc Oxide	1314-13-2	11.00
Quartz	14808-60-7	0.02	0.39	211					1-Hydroxycyclohexyl phenyl ketone	847-19-3	0.96
Copper	7440-50-8	0.01	0.16	86					Bisphenol A diglycidyl diacrylate	55818-57-0	5.77
Nickel	7440-02-0	0.05	0.91	494					Tripropylene glycol diacrylate	42978-96-5	2.98
Aluminum oxide	1344-28-1	0.32	4.88	3176					Silica	112945-52-5	0.00
Silver	7440-22-4	0.00	0.08	46					1-Hydroxycyclohexyl phenyl ketone	847-19-3	0.11
Quartz	14808-60-7	0.00	0.08	44					Quartz	14808-60-7	0.14
Silicon	7440-21-3	0.00	0.00	1					Bisphenol A diglycidyl diacrylate	55818-57-0	0.21
Cobalt	7440-48-4	0.02	0.41	222					Tripropylene glycol diacrylate	42978-96-5	0.04
Iron	7439-89-6	0.07	1.20	699					Trade Secret	Trade Secret	0.05
Manganese	7439-96-5	0.00	0.01	6					Nickel	7440-02-0	0.10
Chromium	7440-21-3	0.00	0.00	1					Silver	7440-22-4	0.95
Nickel	7440-02-0	0.05	0.89	482					Tin	7440-51-8	0.40
2-(chloromethyl)propane, 2-methylolol formaledehyde	29900-82-2	16.28	326.03	16918					Total		100.00
Aluminum hydroxide	21645-51-2	6.45	119.52	64524				16.00	(mg) Total	Crystal Oscillator	% of Total Weight
Fiber Glass Wool	65997-17-3	0.28	338.03	16918					Tungsten	7440-33-7	16.41
Barium sulfate	7727-43-7	0.05	0.98	501					Molybdenum	7439-98-5	0.07
Titanium dioxide	14853-62-7	0.11	1.97	1062					Cobalt	7440-48-4	3.89
Dibenzyl bisphenol A resin	29006-38-6	0.16	2.98	1779					Chromium Oxide	1306-38-9	0.07
Naphtha	8030-36-6	0.02	0.33	177					Iron	7439-89-6	16.41
3-Methacryloyloxypropyltrimethoxysilane	2530-85-0	0.07	1.32	715					Gold	7440-57-5	0.20
Formaldehyde, polymer with 2-(chloromethyl)propane and 2-methylolol	29900-82-2	0.45	8.35	4506					Quartz	14808-60-7	2.61
Solvent naphtha	64742-94-5	0.07	1.32	715					Copper	7440-50-8	1.06
Quartz	14808-60-7	0.42	7.82	4200					Nickel	7440-02-0	6.10
Solvent naphtha	64742-94-5	0.25	4.64	2503					Aluminum oxide	1344-28-1	16.20
2-Methyl-1-(4-methylphenyl)-2-methylololpropan-1-one	7189-10-5	0.07	1.32	715					Silver	7440-22-4	0.97
Epoxy novolac resin	24959-86-0	0.09	1.72	930					Quartz	14808-60-7	0.04
2-(chloromethyl)propane, 2-methylolol formaledehyde	29900-82-2	2.11	39.13	2127					Silicon	7440-21-3	0.01
Arsenic	7440-38-2	0.00	0.01	5					Copper	7440-50-8	0.75
Aluminum hydroxide	21645-51-2	1.66	30.69	16626					Iron	7439-89-6	6.63
Chromium	7440-21-3	0.00	0.01	6					Manganese	7439-96-5	0.07
Copper	7440-50-8	3.39	62.72	33859					Nickel	7440-02-0	0.01
Nickel	7440-02-0	0.00	0.03	16					Chromium	7440-21-3	0.01