

**Material Data Declaration Sheet**

**ECS INC. INTERNATIONAL**

ECS Model Number	ECX-1247 (-47 Package Type)
Product Description	1.6x1.2mm SMD Crystal
Product Revision	
Product Total Weight	0.003297g/pcs



Contact Information	Company	ECS INC. INTERNATIONAL
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Homogenous Component/Subcomponent	Homogenous Component/Subcomponent Weight (g)	Substance	CAS number	Substance Weight (g)	PPM Level (If Available) (Substance Weight/Total Homogenous Component or Subcomponent Weight*1000000)	Purpose/Location
Base	0.002241	Alumina-Al <sub>2</sub> O <sub>3</sub>	1344-28-1	0.000904	403391	Ceramic
		Manganese(III)oxide	1317-34-6	0.000033	14726	Ceramic
		Silica-SiO <sub>2</sub>	7631-86-9	0.000032	14279	Ceramic
		Molybdenum Oxide (VI)	1313-27-5	0.000005	2231	Ceramic
		Magnesia-MgO	1309-48-4	0.000003	1339	Ceramic
		Molybdenum-Mo	7439-98-7	0.000398	177599	Electric conductor
		Iron-Fe	7439-89-6	0.000258	115127	Sealing
		Nickel-Ni	7440-02-0	0.000139	62026	Sealing
		Cobalt-Co	7440-48-4	0.000081	36145	Sealing
		Silver-Ag	7440-22-4	0.000101	45069	Brazing
		Copper-Cu	7440-50-8	0.000018	8032	Brazing
		Nickel-Ni	7440-02-0	0.000220	98170	Ni plating
Cover	0.000810	Cobalt-Co	7440-48-4	0.000024	10710	Ni plating
		Gold-Au	7440-57-5	0.000025	11156	Au plating
		Iron-Fe	7439-89-6	0.000359	443210	Alloy
		Nickel-Ni	7440-02-0	0.000319	393827	Alloy
		Cobalt-Co	7440-48-4	0.000126	155556	Alloy
		Manganese-Mn	7439-96-5	0.000004	4938	Alloy
Crystal Blank	0.000144	Silicon-Si	7440-21-3	0.000001	1235	Alloy
		Aluminum-Al	7429-90-5	0.000001	1235	Alloy
Electrode	0.000019	Silica-SiO <sub>2</sub>	14808-60-7	0.000144	1000000	Quartz crystal
		Silver-Ag	7440-22-4	0.000018	947368	Electrode
Electro Conductive Adhesive	0.000083	Chromium-Cr	7440-47-3	0.000001	52632	Electrode
		Silver-Ag	7440-22-4	0.000062	746988	Connect
		Silicon-Si	7440-21-3	0.000021	253012	Support