

## Material Data Declaration Sheet

ECS Part Number	ECX-33QZ (-33QZ)	
Product Description	3.2 x 2.5mm SMD AEC-Q200 TPMS Crystal	
Product Revision		
Product Total Weight	0.02g/pcs	
Contact Information	Company	ECS INC INTERNATIONAL
	Contact Name	AJ Anderson
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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
3225 PKG	0.0165	Alumina-Al <sub>2</sub> O <sub>3</sub>	1344-28-1	0.00623700	378000	Ceramic
		Silica-SiO <sub>2</sub>	14808-60-7	0.00021500	13030	Ceramic
		Titanium oxide-TiO <sub>2</sub>	13463-67-7	0.00003300	2000	Ceramic
		Magnesia-MgO	1309-48-4	0.00003300	2000	Ceramic
		Calcium-Ca	7440-70-2	0.00003300	2000	Ceramic
		Chromium oxide-Cr <sub>2</sub> O <sub>3</sub>	1308-38-9	0.00038000	23030	Ceramic
		Tungsten-W	7440-33-7	0.00189500	114848	Electric conductor
		Molybdenum-Mo	7439-98-7	0.00006600	4000	Electric conductor
		Silver-Ag	7440-22-4	0.00056100	34000	Brazing material
		Copper-Cu	7440-50-8	0.00021500	13030	Brazing material
		Iron-Fe	7439-89-6	0.00328400	199030	Kovar ring
		Nickel-Ni	7440-02-0	0.00176600	107030	Kovar ring
		Cobalt-Co	7440-48-4	0.00102300	62000	Kovar ring
		Nickel-Ni	7440-02-0	0.00039600	24000	Ni plating
		Cobalt-Co	7440-48-4	0.00016500	10000	Ni plating
Gold-Au	7440-57-5	0.00019800	12000	Au plating		
LID	0.001	Iron-Fe	7439-89-6	0.00053230	532300	Alloy
		Nickel-Ni	7440-02-0	0.00029490	294900	Alloy
		Cobalt-Co	7440-48-4	0.00016760	167600	Alloy
		Manganese-Mn	7439-96-5	0.00000390	3900	Alloy
		Silicon-Si	7440-21-3	0.00000080	800	Alloy
		Copper-Cu	7440-50-8	0.00000050	500	Alloy
Blank	0.0015	Silica-SiO <sub>2</sub>	14808-60-7	0.00150000	1000000	Quartz crystal
Silver	0.0005	Silver-Ag	7440-22-4	0.00049997	999940	Electrode
		Copper-Cu	7440-50-8	0.00000002	40	Electrode
		Iron-Fe	7439-89-6	0.00000001	20	Electrode
Epoxy	0.0005	Silver-Ag	7440-22-4	0.00042500	850000	Connect
		Silicone Resin	67763-03-5	0.00007500	150000	Support