

**Material Data Declaration Sheet**

**ECS INC. INTERNATIONAL**

Supplier Part Number	ECS-3215MV-327KE
Product Description	3.2 x 1.5mm 32.768kHz SMD Multi-Volt Oscillator
Product Revision	
Product Total Weight	0.01349g/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
Ceramic Base	0.011100000	Al <sub>2</sub> O <sub>3</sub>	1344-28-1	0.006170000	555856	Ceramic
		SiO <sub>2</sub>	7631-86-9	0.000300000	27027	Ceramic
		CaO	1305-78-8	0.000040000	3604	Ceramic
		MgO	1309-48-4	0.000040000	3604	Ceramic
		Cr <sub>2</sub> O <sub>3</sub>	1308-38-9	0.000050000	4505	Ceramic
		Mo	7439-98-7	0.000060000	5405	Ceramic
		W	7440-33-7	0.001850000	166667	Electric conductor
		Mo	7439-98-7	0.000060000	5405	Electric conductor
		Fe	7439-89-6	0.000830000	74775	Seal Ring
		Co	7440-48-4	0.000260000	23423	Seal Ring
		Ni	7440-02-0	0.000450000	40541	Seal Ring
		Ag	7440-22-4	0.000520000	46847	Silver Solder
		Cu	7440-50-8	0.000090000	8108	Silver Solder
		Ni	7440-02-0	0.000240000	21622	Electrode
		Co	7440-48-4	0.000060000	5405	Electrode
		Au	7440-57-5	0.000079998	7207	Electrode
Tl	7440-28-0	0.000000002	0	Electrode		
LID	0.001850000	Fe	7439-89-6	0.000903400	488324	Alloy
		Co	7440-48-4	0.000287600	155459	Alloy
		Ni	7440-02-0	0.000649500	351081	Alloy
		Mn	7439-96-5	0.000007300	3946	Alloy
		Si	7440-21-3	0.000001200	649	Alloy
		Cr	7440-47-3	0.000000800	432	Alloy
		C	7440-44-0	0.000000200	108	Alloy
Blank	0.000162000	SiO <sub>2</sub>	14808-60-7	0.000154337	952698	Quartz crystal
		Cr	7440-47-3	0.000001952	12049	Electrode
		Au	7440-57-5	0.000005427	33500	Electrode
		Silica, vitreous	60676-86-0	0.000000284	1753	Protection Membrane
Conductive Adhesive	0.000088000	Ag	7440-22-4	0.000069080	785000	Adhesive
		Silicone Resin	67763-03-5	0.000012672	144000	Adhesive
		n-Dodecane	112-40-3	0.000006160	70000	Adhesive
		Alkoxysilane	3388-04-3	0.000000088	1000	Adhesive
Underfill	0.000180000	Acid anhydride(A)	19438-60-9	0.000045000	250000	Underfill
		Liquid epoxy(bisphenol A	25068-38-6	0.000018000	100000	Underfill
		Epoxy Compound	27610-48-6	0.000003600	20000	Underfill
		Epoxy Resin	5026-74-4	0.000003600	20000	Underfill
		Liquid epoxy(bisphenol F	9003-36-5	0.000003600	20000	Underfill
		SiO <sub>2</sub>	14808-60-7	0.000102600	570000	Underfill
		Acid anhydride(B)	85-42-7	0.000003240	18000	Underfill
C	1333-86-4	0.000000360	2000	Underfill		
IC	0.000110000	Si	7440-21-3	0.000108270	984273	IC
		Al	7429-90-5	0.000000600	5455	IC
		Ti	7440-32-6	0.000000370	3364	IC
		W	7440-33-7	0.000000760	6909	IC