

GTXO-C99 - 2.5 & 3.3V (VC)TCXO CMOS High Precision					
Sub-Assembly	Material	Substance	CAS No	Mass (mg)	Sub-Assembly % by mass
IC	Silicon substrate	Si	7440-21-3	1.044	99.43
	Silicon substrate	Al	7429-90-5	0.003	0.29
	Silicon substrate	W	7440-33-7	0.001	0.10
	Silicon substrate	Ti	7440-32-6	0.002	0.19
TP Base	Au plate	Au	7440-57-5	0.130	0.62
	Ceramic	Al ₂ O ₃	1344-28-1	13.160	63.24
	Ceramic	CaO	1305-78-8	0.090	0.43
	Ceramic	Cr ₂ O ₃	1308-38-9	0.100	0.48
	Ceramic	MgO	1309-48-4	0.090	0.43
	Ceramic	Mo	7439-98-7	0.140	0.67
	Ceramic	SiO ₂	14808-60-7	0.640	3.08
	Metallisation	Mo	7439-98-7	0.090	0.43
	Metallisation	W	7440-33-7	2.920	14.03
	Ni plate	Co	7440-48-4	0.090	0.43
	Ni plate	Ni	7440-02-0	0.380	1.83
	Seal Ring	Co	7440-48-4	0.380	1.83
	Seal Ring	Fe	7439-89-6	1.210	5.81
	Seal Ring	Ni	7440-02-0	0.650	3.12
	Solder	Ag	7440-22-4	0.630	3.03
	Solder	Cu	7440-50-8	0.110	0.53
Tin paste	Resin	Epoxy resin trade secret	0	0.293	9.75
	solder alloy	Sn	7440-31-5	2.610	86.86
	solder alloy	Ag	7440-22-4	0.079	2.63
	solder alloy	Cu	7440-50-8	0.023	0.77
XX Crystal	Adhesive	Ag	7440-22-4	0.480	2.48
	Adhesive	SiO ₂	14808-60-7	0.060	0.31
	Adhesive	Epoxy resin trade secret	0	0.060	0.31
	Base Ceramic	Al ₂ O ₃	1344-28-1	7.767	40.12
	Base Ceramic	Cr ₂ O ₃	1308-38-9	0.173	0.89
	Base Ceramic	Mo	7439-98-7	0.173	0.89
	Base Ceramic	SiO ₂	14808-60-7	0.518	2.68
	Base Metallisation	W	7440-33-7	2.690	13.89
	Base Plate Au	Au	7440-57-5	0.120	0.62
	Base Plate Ni	Ni	7440-02-0	0.420	2.17
	Base Seal ring	Co	7440-48-4	0.403	2.08
	Base Seal ring	Fe	7439-89-6	1.187	6.13
	Base Seal ring	Ni	7440-02-0	0.650	3.36
	Base Solder	Ag	7440-22-4	0.398	2.06
	Base Solder	Cu	7440-50-8	0.162	0.84
	Blank	SiO ₂	14808-60-7	0.500	2.58
	Electrode material	Ni	7440-02-0	0.010	0.05

Material Composition Data

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Sub-Assembly	Material	Substance	CAS No	Mass (mg)	Sub-Assembly % by mass
XX Crystal	Electrode material	Ag	7440-22-4	0.090	0.46
	Kovar Lid	Fe	7439-89-6	1.730	8.94
	Kovar Lid	Ni	7440-02-0	0.930	4.80
	Kovar Lid	Co	7440-48-4	0.540	2.79
	Lid Plate	Ni	7440-02-0	0.300	1.55

Total Mass: 44.226 mg

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