

# Material Composition Data



Product: GTXO-93

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## GTXO-93 - 1.8V ~ 3.6V SM (VC)TCXO for GPS

Sub-Assembly	Material	Substance	CAS No	Mass (mg)	Sub-Assembly % by mass
<b>Base 1</b>	Ceramic	Al <sub>2</sub> O <sub>3</sub>	1344-28-1	10.249	74.27
	Ceramic	Au	7440-57-5	0.080	0.58
	Ceramic	CaO	1305-78-8	0.073	0.53
	Ceramic	Co	7440-48-4	0.159	1.15
	Ceramic	Cr <sub>2</sub> O <sub>3</sub> (Non hex)	1308-38-9	0.077	0.56
	Ceramic	MgO	1309-48-4	0.068	0.49
	Ceramic	Mo	7439-98-7	0.160	1.16
	Ceramic	Ni	7440-02-0	0.638	4.62
	Ceramic	SiO <sub>2</sub>	14808-60-7	0.501	3.63
	Ceramic	W	7440-33-7	1.795	13.01
<b>Base 2</b>	Ceramic	Al <sub>2</sub> O <sub>3</sub>	1344-28-1	10.260	71.75
	Ceramic	Au	7440-57-5	0.099	0.69
	Ceramic	CaO	1305-78-8	0.070	0.49
	Ceramic	Co	7440-48-4	0.190	1.33
	Ceramic	Cr <sub>2</sub> O <sub>3</sub> (Non hex)	1308-38-9	0.080	0.56
	Ceramic	MgO	1309-48-4	0.070	0.49
	Ceramic	Mo	7439-98-7	0.170	1.19
	Ceramic	Ni	7440-02-0	0.749	5.24
	Ceramic	SiO <sub>2</sub>	14808-60-7	0.501	3.50
	Ceramic	W	7440-33-7	2.111	14.76
<b>Blank</b>	SiO <sub>2</sub>	SiO <sub>2</sub>	14808-60-7	0.300	100.00
<b>IC</b>	Wafer Chip (Die)	Al	7429-90-5	0.003	0.38
	Wafer Chip (Die)	Si	7440-21-3	0.797	99.63
<b>Lid</b>	Kovar (Fe/Ni/Co alloy lid)	C	7440-44-0	0.020	0.50
	Kovar (Fe/Ni/Co alloy lid)	Co	7440-48-4	0.620	15.58
	Kovar (Fe/Ni/Co alloy lid)	Fe	7439-89-6	1.960	49.25
	Kovar (Fe/Ni/Co alloy lid)	Mn	7439-96-5	0.020	0.50
	Kovar (Fe/Ni/Co alloy lid)	Ni	7440-02-0	0.280	7.04
	Kovar (Fe/Ni/Co alloy lid)	Ni	7440-02-0	1.070	26.88
	Kovar (Fe/Ni/Co alloy lid)	Si	7440-21-3	0.010	0.25
<b>Total Mass:</b>				<b>33.180 mg</b>	

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