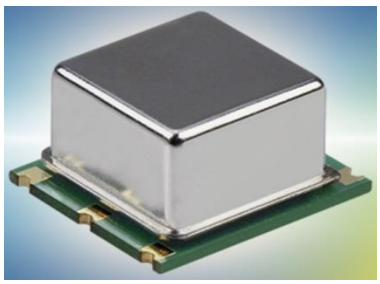
RoHS COMPLIANT

ECOC-2522
SMD OCXO

The ECOC-2522 is a SMD CMOS SC-Cut OCXO. The 25.4 x 22.0 x 12.2 mm SMD package is ideal for Cellular, Radar, Test & Measurement and IOT applications.

ECS INC INTERNATIONAL®

ECOC-2522 OCXO



- SC Cut
- 25.4 x 22 mm Footprint
- Extended Temp Range
- RoHS Compliant

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECOC-2522			UNITS
		MIN	TYP	MAX	
Frequency Range		2.000		100.000	MHz
Frequency Stability	0 ~ +50°C (F Opt)			± 5.0	ppb
	-20 ~ +70°C (G Opt)			± 10.0	ppb
	-40 ~ +75°C (H Opt)			±30.0	ppb
	Supply Voltage ±5%			±20.0	ppb
	Warm-Up @+25°C (≤ 3 minutes)			±100.0	ppb
	Load Change (±10%)			±0.2	ppm
Power Consumption	At turn on			3.6	Watts
Power Consumption	Steady State			1.4	Watts
Supply Voltage	3.3 Option	3.135	3.3	3.465	V
Supply Voltage	5.0 Option	4.75	5.0	5.25	V
Aging	Daily (after 30 days)			±1.0	ppb
	Yearly			±100	ppb
	10-Years			±500	ppb
Waveform	CMOS				
Output voltage Level	V_{OL}:10%V_{dd} max./V_{OH}:90%V_{dd} min.V DC				
Output Load			15		pF
Rise & Fall time	10%V_{dd} – 90%V_{dd}			5	ns
Duty Cycle	@ ½ V_{dd}			45/55	%
Waveform	Sinewave				
Peak Power		2.0			dBm
Output Load			50		Ω
Spurious Response				-70	dBc
Phase Noise	@ 10 MHz Carrier, Vdd 3.3V				
@ 1 Hz Offset				-90	dBc/Hz
@ 10 Hz Offset				-120	dBc/Hz
@ 100 Hz Offset				-135	dBc/Hz
@ 1,000 Hz Offset				-145	dBc/Hz
@ 10,000 Hz Offset				-150	dBc/Hz
@ 100 KHz Offset				-150	dBc/Hz
@ 1 MHz Offset				-150	dBc/Hz
Control Voltage Range	Positive Slope	0	Vdd/2	Vdd	V
Frequency Pull Range		±0.7			ppm
VC Port Impedance		10			kΩ
Storage Temperature		-40		+100	°C

Rev.2016

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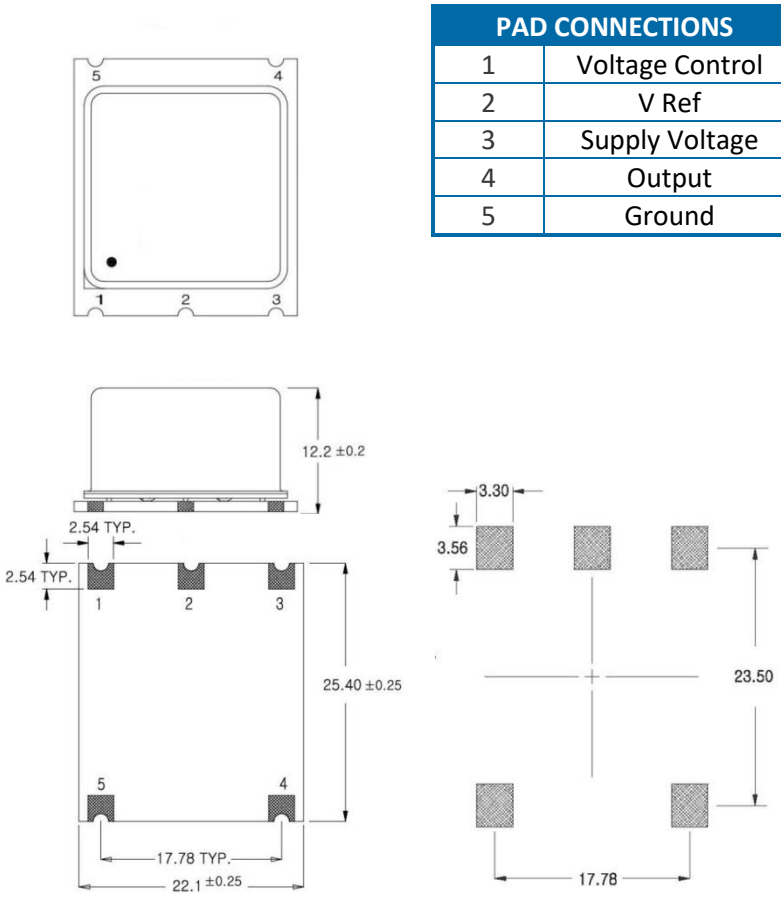
PART NUMBERING GUIDE: Example ECOC-2522-10.000-3-F-C

ECOC - SERIES	FREQUENCY	VOLTAGE	STABILITY /TEMP	OUTPUT
2522 25.4 x 22 mm OCXO	10.000 MHz	3 = +3.3V 5 = +5.0V	F = ±5 ppb 0 ~ +50°C G = ±10 ppb -20 ~ +70°C H = ±30 ppb -40 ~ +75°C	C = CMOS S = Sinewave

DIMENSIONS (mm)



PAD CONNECTIONS	
1	Voltage Control
2	V Ref
3	Supply Voltage
4	Output
5	Ground

FREQUENCY MHz
10.000
12.800
13.000
16.384
20.000
38.400
38.800
40.000
100.000

SOLDER PROFILE
Peak solder Temp +260°C Max 10 sec Max.
2 Cycles Max.
MSL 1, Lead Finish Au

Figure 1) *Top, Side, Bottom and suggested Land pattern.*