



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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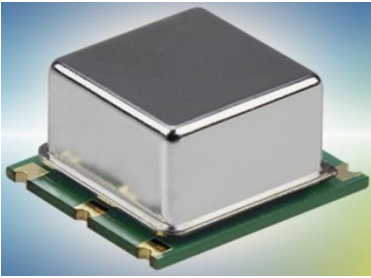
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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.

ECOC-2522 SMD OCXO

ECX-2520 SMD HCMOS TCXO



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

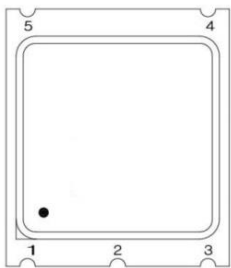
OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| 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 | VOL:10%V _{dd} max./VOH: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, V _{dd} 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 | V _{dd} /2 | V _{dd} | V |
| Frequency Pull Range | | ±0.7 | | | ppm |
| VC Port Impedance | | 10 | | | kΩ |
| Storage Temperature | | -40 | | +100 | °C |

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

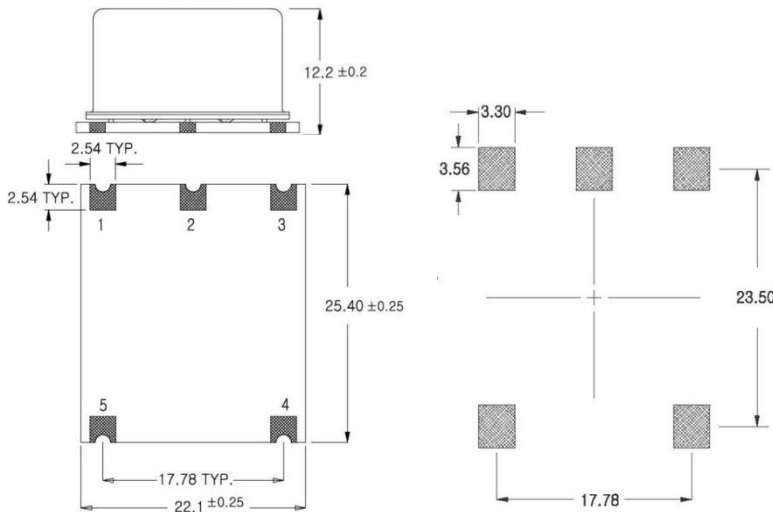
| ECOC - SERIES | FREQUENCY | VOLTAGE | STABILITY /TEMP | OUTPUT |
|---------------------------|------------|------------------------|---|--------------------------|
| 2522 25.4 x 22 mm OCXO | 10.000 MHz | 3 = +3.3V 5 = +5.0V | F = ±5 ppb 0 ~ +50°C G = ±10 ppb -20 ~ +70°C H = ±30 ppb -40 ~ +75°C | C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