

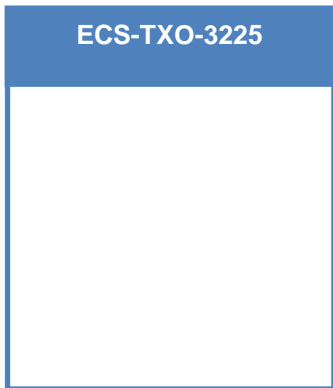
ECS-TXO-3225

HCMOS TCXO

ECS-TXO-3225 (3.3V) HCMOS SMD TCXO and ECS-VTXO-3225 (3.3V) HCMOS SMD VC-TCXO are ideal for portable, wireless applications where stability is critical.

[Request a Sample](#)

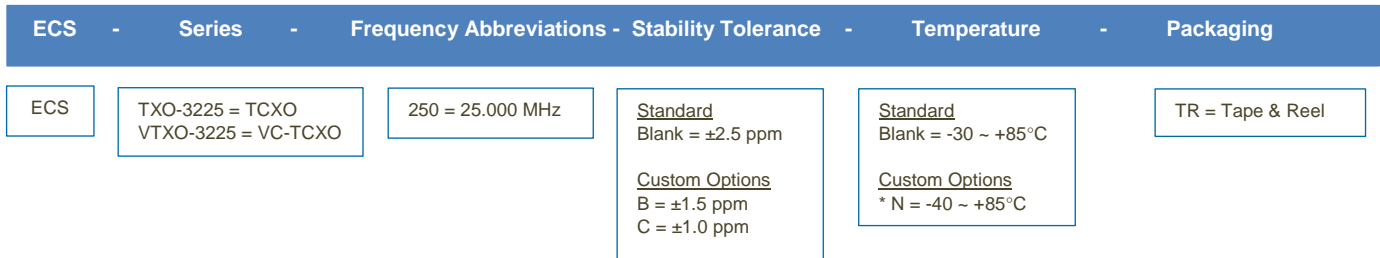
OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS



- HCMOS TCXO/VC-TCXO
- 3.2 x 2.5 mm Footprint
- PbFree/RoHS Compliant
- Peak solder temp +260°C (10 sec)
- MSL 1
- Lead Finish Au

| Parameters | Conditions | ECS-TXO-3225 | | | Units |
|-----------------------|-------------------------|--------------|-------|--------|--------|
| | | MIN | TYP | MAX | |
| Frequency Range | | 8.192 | | 40.000 | MHz |
| Operating Temperature | * Standard | -30 | | +85 | °C |
| Storage Temperature | | -40 | | +90 | °C |
| Input Voltage | VDD | +3.135 | +3.3 | +3.465 | VDC |
| Frequency Stability | Vs. Temp (-30 ~ +85°C) | | | ±2.5 | PPM |
| | Vs. Supply Change (±5%) | | | ±0.3 | PPM |
| | Vs. Load Change (±5%) | | | ±0.3 | PPM |
| | Vs. Aging/Year | | | ±1.0 | PPM |
| Frequency Tolerance | @ +25°C ±2°C | | | ±1.5 | PPM |
| Current Consumption | | | | 6.0 | mA |
| “0” Level | VOL | | | 0.5 | VDC |
| “1” Level | VOH | 80% VDD | | | VDC |
| Output Symmetry | @50% VDD Level | | | 40/60 | % |
| Rise and Fall Times | 10% VDD to 90% Level | | | 10 | ns |
| Output Load | CMOS | | | 15 | pF |
| Start-up Time | | | | 2.0 | mS |
| Phase Noise | @ 1 KHz Offset | | | -135 | DBc/Hz |
| ECS-VTXO-3225 Option | | | | | |
| Control Voltage | Pin 1 | +0.15 | +1.65 | +3.15 | VDC |
| Pullability | | ±5 | | | PPM |

Part Numbering Guide: Example ECS-TXO-3225-250-TR



* Consult Factory for availability of ±1 ppm -40 ~ 85°C



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Package Dimensions (mm)

Figure 2) Land Pattern

Figure 1) Top, Side, and Bottom views

| Pin Connections | |
|-----------------|--------------------------|
| #1 | N/C or V _{CONT} |
| #2 | Ground |
| #3 | Output |
| #4 | VDD |

| Developed Frequencies | |
|-----------------------|-----------------|
| * Abbreviation | Frequency (MHz) |
| 100 | 10.000 |
| 120 | 12.000 |
| 122.8 | 12.288 |
| 147.4 | 14.7456 |
| 160 | 16.000 |
| 200 | 20.000 |
| 250 | 25.000 |
| 270 | 27.000 |