

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

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.

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PARAMETERS | CONDITIONS | | | | 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 |

DIMENSIONS (mm)

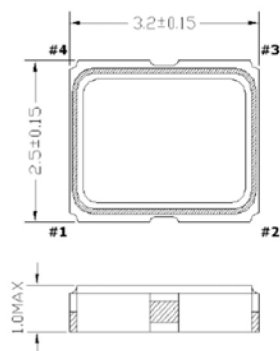


Figure 1) Top, Side and Bottom views

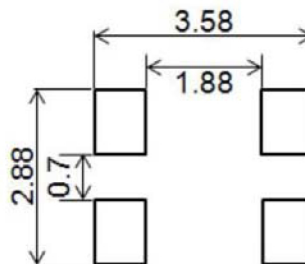
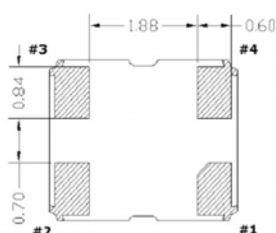


Figure 2) Suggested Land Pattern

Pin Connections

| | |
|--------|--------------|
| Pin #1 | N/C or VCONT |
| Pin #2 | Ground |
| Pin #3 | Output |
| Pin #4 | VDD |

PART NUMBERING GUIDE: Example ECS-TXO-3225-250-TR

ECS - Series - Frequency Abbreviation - Stability - Temp - TR

TXO-3225= TCXO
VTXO-3225=VC-TCXO

250 = 25.000 MHz
See Developed Frequencies

Standard
Blank = ±2.5 ppm
Custom Options
B= ±1.5 ppm
C= ±1.0 ppm

Standard
Blank = -30 ~ +85°C
Custom Options
* N= -40 ~ +85°C

TR=
Tape & Reel

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 |

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ECS:

[ECS-TXO-3225-160-TR](#) [ECS-TXO-3225-100-TR](#) [ECS-TXO-3225-270-TR](#) [ECS-TXO-3225-200-TR](#) [ECS-TXO-3225-250-TR](#) [ECS-TXO-3225-120-TR](#) [ECS-TXO-3225-122.8-TR](#) [ECS-TXO-3225-147.4-TR](#)