



# TCXO-VCTCXO TT-VT4000CT Series Ceramic, SMD



### Features:

- ❖ Tri-State Enable
- ❖ High Stability
- ❖ Ceramic Package
- ❖ 5.0 x 3.2 x 1.65 mm

| Parameter                  | Unit   | Min.                            | Max.       |
|----------------------------|--------|---------------------------------|------------|
| Frequency Range            | MHz    | 10.00                           | 40.00      |
| Frequency Tolerance @ 25°C | ppm    | -                               | ±2.0       |
| Frequency Stability        |        |                                 |            |
| vs. Supply Voltage         | ppm    | -                               | ±0.2       |
| vs. Load Change            | ppm    | -                               | ±0.2       |
| vs. Temperature            |        |                                 |            |
| -10 to +60°C               | ppm    | ±0.14                           | ±0.5       |
| -20 to +70°C               | ppm    | ±0.14                           | ±0.5       |
| -40 to +85°C               | ppm    | ±0.28                           | ±0.5       |
| Storage Temperature Range  | °C     | -55                             | +125       |
| Aging (per year)           | ppm    | -                               | ±1.0       |
| Supply Voltage             | V      | 3.3, 5.0 ±5%                    |            |
| Current Consumption        |        |                                 |            |
| (CMOS)                     | mA     | -                               | 6          |
| (Clipped Sine Wave)        | mA     | -                               | 3.5        |
| Output Load                |        |                                 |            |
| (CMOS)                     |        | 15 pF                           |            |
| (Clipped Sine Wave)        |        | 10 KOhms//10 pF                 |            |
| Output Level               |        |                                 |            |
| (CMOS)                     | V      | 90% of VDD min; 10% of VDD max. |            |
| (Clipped Sine Wave)        | V p-p  | 0.8                             | -          |
| VCTCXO Function (Pad 1)    |        |                                 |            |
| Voltage Control Range      | V      | 0.5                             | 2.5        |
| Pulling Range              | ppm    | ±5.0                            | -          |
| Vc Input Impedance         | KOhms  | 100                             | -          |
| Duty Cycle (CMOS only)     | %      | -                               | 45/55      |
| Start Up Time (CMOS only)  | mSec   | -                               | 2.0        |
| Phase Noise                |        |                                 |            |
| @ 100 Hz                   | dBc/Hz | -125 typical                    |            |
| @ 1 kHz                    | dBc/Hz | -145 typical                    |            |
| @ 10 kHz                   | dBc/Hz | -150 typical                    |            |
| Tristate (Pad 1)           |        |                                 |            |
| Enable                     | V      | 70% of VDD                      | -          |
| Disable                    | V      | -                               | 30% of VDD |

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**TT-VT4000CT Package**

Measurements: Inches (mm)  
All Tolerances: ±0.008 (±0.2)

0.065 max.  
(1.65 max.)

| PAD | Function          | PAD | Function |
|-----|-------------------|-----|----------|
| 1   | GNDING (TCXO)     | 2   | GND      |
| 3   | VCONTROL (VCTCXO) | 4   | VCO      |
|     | Output            |     |          |

\*No Solder on Pad 1.  
Please indicate on specification.

Recommended Solder Pattern

| Environmental     |       |
|-------------------|-------|
| Terminal Material | W     |
| Terminal Plating  | Ni/Au |
| REACH Compliant   | Yes   |
| RoHS Compliant    | Yes   |
| RoHS Exemption    | No    |
| Reflow Temp. Max. | 260°C |
| MSL               | 1     |

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*Subject to change without notice.*