

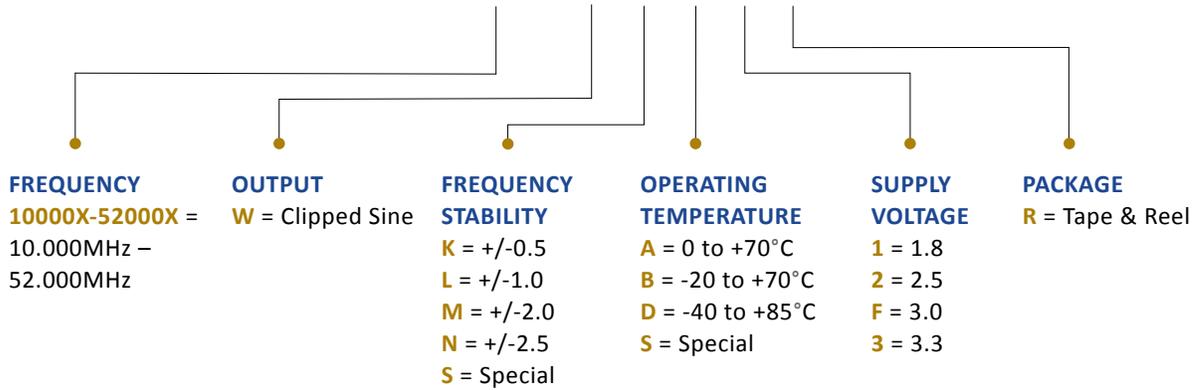
TV02-Series Specifications



2.50L x 2.00W x 0.80H (mm)

PDI TV02-Series Voltage Controlled Temperature Compensated Crystal Oscillator (VCTCXO) ensures a precise frequency under demanding circumstances. With ultra-low phase noise, low jitter, and excellent performance in high vibration environments this VCTCXO is available, in both standard and custom frequencies. PDI provides fast sampling for your proto-typing needs, mass production capability, and competitive pricing.

ex) **TV02-25000X-W-N-D-3-R-X***



* - for standard or assigned for customization.

| Parameter | | Supply Voltage ^{*1} Range (±5%) | Units |
|---------------------------------------|---|--|--------|
| | | 1.8 to 3.3 | V |
| Frequency Range ^{*1} | | 10.000000 to 52.000000 | MHz |
| Frequency Stability ^{*1} | vs Temperature (Max.) | Per Option | ppm |
| | vs Supply Voltage (Max.) | ±0.2 | |
| | vs Load (Max.) | ±0.2 | |
| | vs Aging (Max. 1st year) | ±1 | |
| | Calibration (@ +25°C) 1 Hour After Reflow (Max.) | ±2 | |
| Frequency Adjustment (Positive Slope) | Control Voltage Range | 10 to 90 | %Vcc |
| | Pull Range | ±5 to ±15 | ppm |
| | Linearity (Max) | 10 | % |
| | Input Impedance (Min) | 500K | Ω |
| | Modulation Bandwidth (@-3dB) | 10.0 | KHz |
| Temperature Range ^{*1} | Operating | Per Option | °C |
| | Storage | -55 to +125 | |
| Supply Current (Maximum) | 10.00000 to 25.999999 MHz | 2.0 | mA |
| | 26.000000 to 52.000000 MHz | 2.5 | |
| Waveform | | Clipped Sinewave | |
| Output (Minimum) | Peak to Peak | 0.8 | V |
| Load | | 10 kΩ//10pF | |
| Start Up Time (Maximum) | | 2.0 | ms |
| Phase Noise (Typical) (For 26.0 MHz) | @ 100 Hz | -110 | dBc/Hz |
| | @ 1 kHz | -132 | |
| | @ 10 kHz | -147 | |
| | @ 100KHz | -151 | |

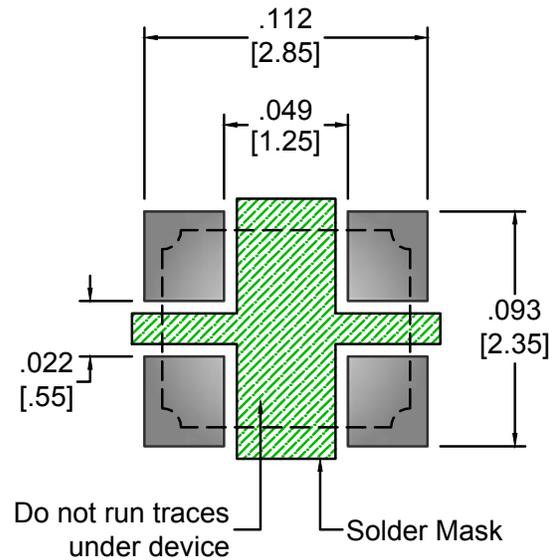
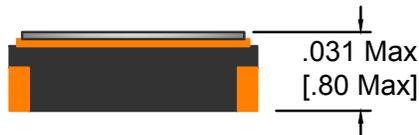
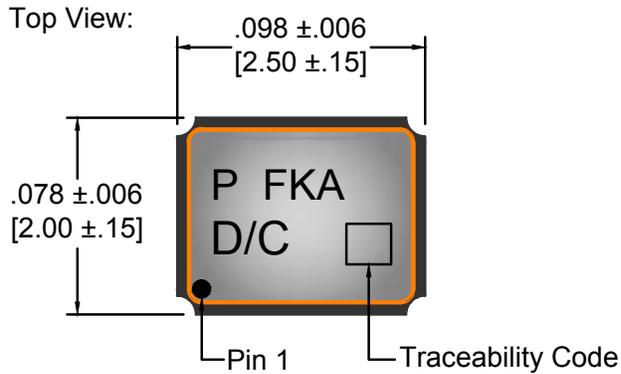
^{*1} - Not all Frequency/Temperature/Voltage combinations are available.

TV02-Series 2.50 x 2.00 x 0.80 (mm)

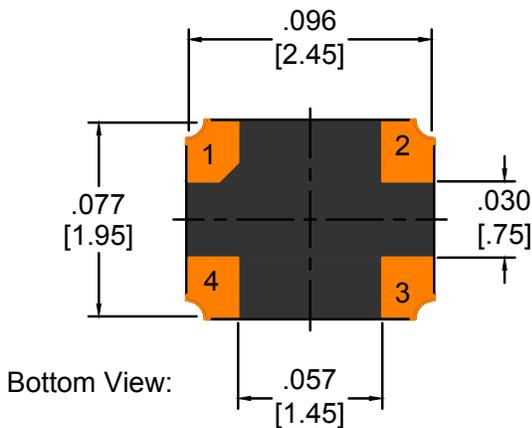
PACKAGE DIMENSIONS

Decimal XXX = ± .008, XX = ± .02 Metric [XXX = ± .20], [XX = ± .50]

| PIN | CONNECTION |
|-----|-----------------|
| 1 | Voltage Control |
| 2 | Ground/Case |
| 3 | Output |
| 4 | Supply Voltage |



Recommended Land Pattern (Top View)



NOTES:
 Terminals are Au.
 Other options are available, please consult factory.
 All product is supplied RoHS and REACH compliant.
 Product can be supplied on Tape and Reel, on reels of 1,000 units.
 Specifications subject to change without notice, last updated 4/1/13.

TV02-Series 2.50 x 2.00 x 0.80 (mm)

1. Material: Black Conductive Polystyrene or equivalent.
2. 10 Sprocket Hole pitch cumulative tolerance of $\pm .008$.
3. Camber in compliance with EIA 481.
4. Empty pockets: Trailing end (Minimum) 200 mm. and Leading end (Minimum) 400 mm.
5. Pocket position relative to sprocket hole measured as true position of pocket, not pocket hole.

