

TV05-Series Specifications

5.00L x 3.20W x 1.50H (mm)

PDI TV05-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) **TV05—25000X—W—N—D—3—R—X***

FREQUENCY

10000X-52000X =
10.000MHz –
52.000MHz

OUTPUT

C = TTL/CMOS
O = LVCMOS
W = Clipped Sine

FREQUENCY STABILITY

K = +/-0.5
L = +/-1.0
M = +/-2.0
N = +/-2.5
S = Special

OPERATING TEMPERATURE

A = 0 to +70°C
B = -20 to +70°C
D = -40 to +85°C
S = Special

SUPPLY VOLTAGE

F = 3.0
3 = 3.3
5 = 5.0

PACKAGE

R = Tape & Reel

* - for standard or assigned for customization.

Parameters		Clipped Sinewave	CMOS	Units
Frequency Range *1		10.000000 to 52.000000	10.000000 to 52.000000	MHz
Frequency Stability *1	vs Temperature (Max.)	Per Option	Per Option	ppm
	vs Supply Voltage (Max.)	±0.2	±0.2	
	vs Load (Max.)	±0.2	±0.2	
	vs Aging (Max 1st year)	±1	±1	
	Calibration (@ +25°C) 1 Hour After Reflow (Max)	±2	±2	
Frequency Adjustment (Positive Slope)	Control Voltage Range	10 to 90	10 to 90	%Vcc
	Pull Range	±5 to ±15	±5 to ±15	ppm
	Linearity (Max)	10	10	%
	Input Impedance (Min)	100K	100K	Ω
	Modulation Bandwidth (@-3dB)	10.0	10.0	KHz
Temperature Range *1	Operating	Per Option	Per Option	°C
	Storage	-55 to +125	-55 to +125	
Supply Voltage *1		Per Option	Per Option	V
Supply Current (Max)		5.0	10.0	mA
Waveform		Clipped Sinewave 0.8V Peak to Peak Min	CMOS	
Output	Low Level Output Voltage (Max)	N/A	10	%Vcc
	High Level output Voltage (Min)	N/A	90	%Vcc
	Duty Cycle (Max)	N/A	40/60	%
Load		10 kΩ//10pF	15pF	
Start Up Time (Max)		3.0	3.0	ms
Phase Noise (Typical For 26.0 MHz)	@ 100 Hz	-110	-110	dBc/Hz
	@ 1 kHz	-130	-130	
	@ 10 kHz	-145	-145	
	@ 100 kHz	-145	-145	

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

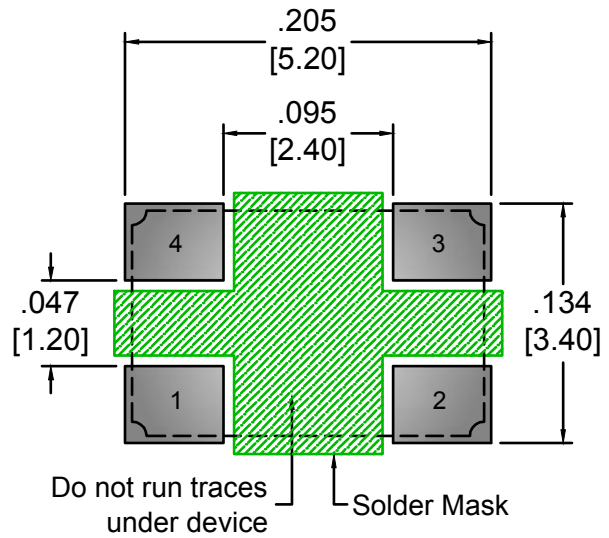
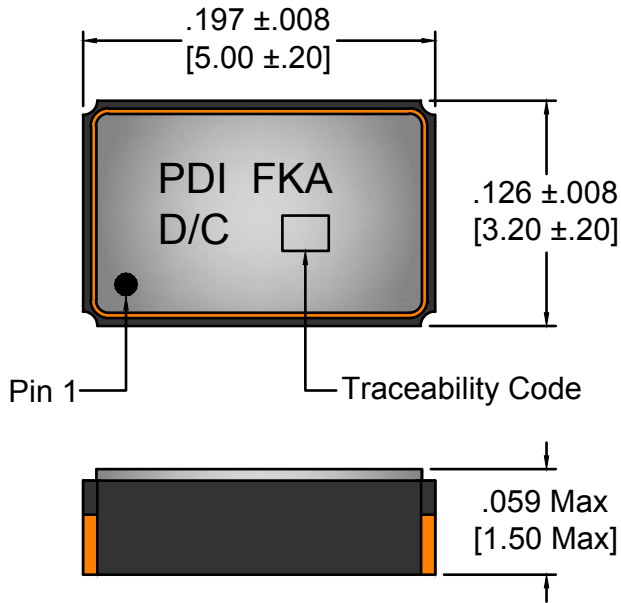
TV05-Series 5.00 x 3.20 x 1.50 (mm)



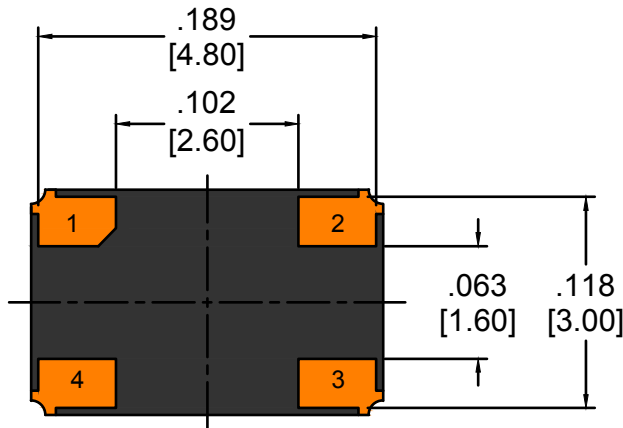
PACKAGE DIMENSIONS

Decimal XXX = $\pm .008$, XX = $\pm .02$ Metric [XXX = $\pm .20$], [XX = $\pm .50$]

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.

TV05-Series 5.00 x 3.20 x 1.50 (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.

