

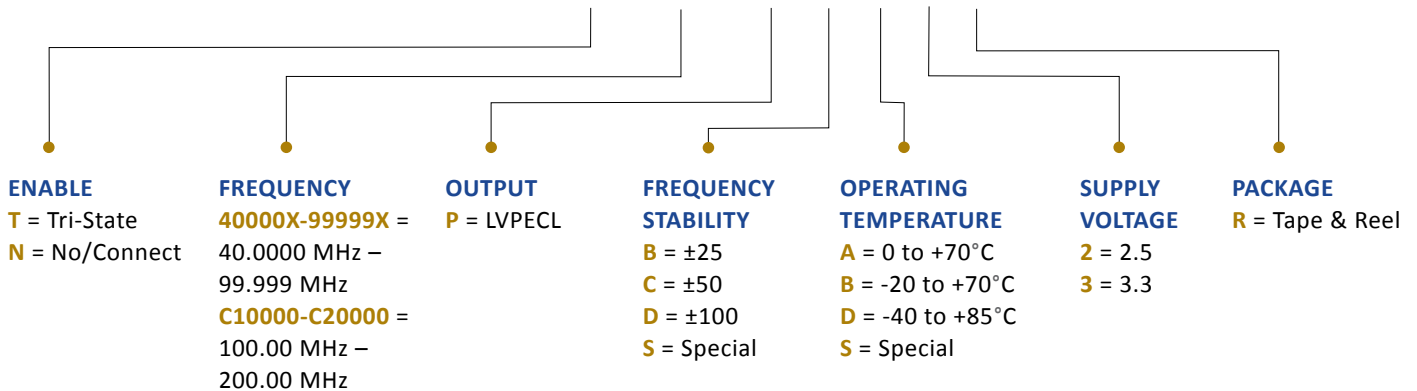
PE5-Series Specifications



5.00L x 3.20W x 1.20H (mm)

PDI Model *PE5-Series* provides precision timing in a hermetically sealed package. These high performance clock oscillators offer very low integrated phase jitter and superior phase noise. PDI provides quick-turn sampling for your proto-typing needs, mass production capability, and competitive pricing.

ex) **PE5—T—5000X—M—C—A—2—R—X***



* - for standard or assigned for customization.

Parameter		Supply Voltage *1 (±5%)		Units
		3.3	2.5	V
Frequency Range *1		40.000000 to 200.000000		MHz
Frequency Stability *1	All Causes (Maximum) *2	Per Option		ppm
Temperature Range *1	Operating	Per Option		°C
	Storage	-55 to +125		°C
Supply Current (Maximum)		65		mA
Output		Differential PECL Squarewave		
Load (Typical)	Into Vcc-2V	50		Ω
Duty Cycle (Maximum)	@ 50% Vcc	45/55		%
Rise/Fall Times (Maximum)	Rise Time (20% to 80% Vcc)	0.5		nS
	Fall Time (80% to 20% Vcc)	0.5		
Start up Time (Maximum)		10.0		mS
Output Voltage Levels	High Voh (50Ω to Vcc-2V)	Vcc-1.025 Min, Vcc-0.95 Typ, Vcc-0.88 Max		V
	Low Vol (50Ω to Vcc-2V)	Vcc-1.810 Min, Vcc-1.70 Typ, Vcc-1.62 Max		
Differential Voltage		595 Min , 750 Typ , 930 Max		mV
Pin 1 (Tri-State) (Option)	High (See below) or Open	Enable		
	Low (See below) *3	Disable		
	High Value (Minimum)	70		% Vcc
	Low Value (Maximum) *3	30		% Vcc
	Disable Current (Typical) *3	10		uA
	Enable Delay Time (Maximum)	2.0		mS
	Disable Delay Time (Maximum)	0.2		uS
Integrated Phase Jitter (RMS)	12KHz to 20MHz	0.2 Typical , 1.0 Maximum		pS
Phase Noise (Typical)	@ 10KHz Offset	-138		dBc/Hz
	@ 100KHz Offset	-144		

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

*2 - Inclusive of Tolerance @25°C, Operating Temperature, Supply Voltage, Load, Aging, Shock and Vibration.

*3 - Internal crystal oscillation halted.

TYPICAL PHASE NOISE PLOT

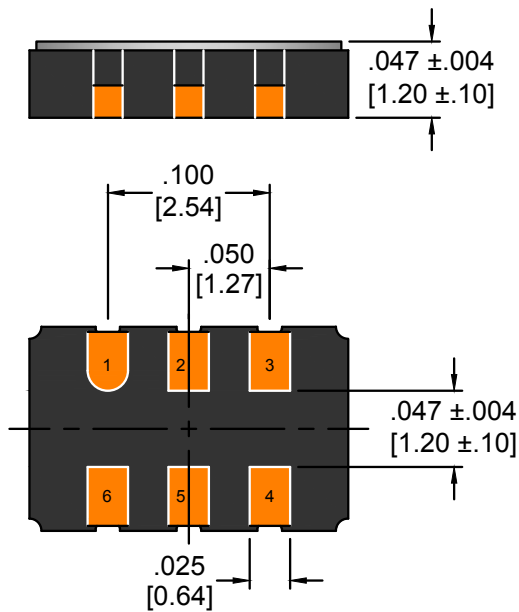
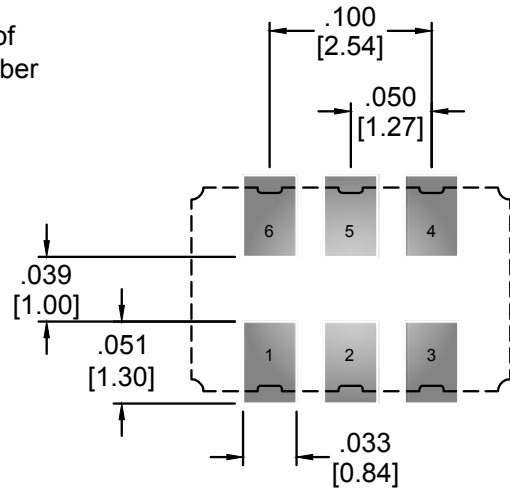
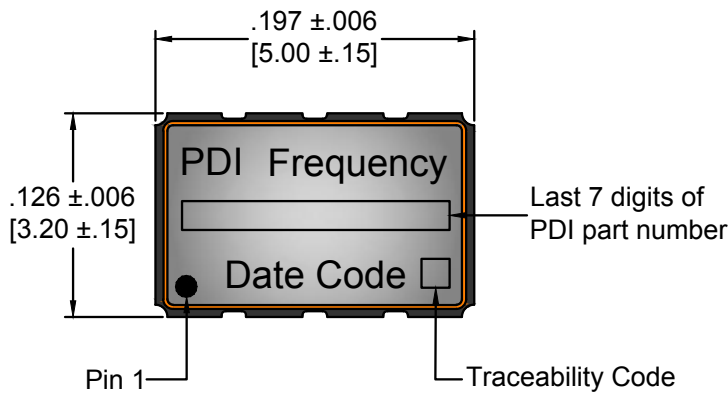


PE5-Series 5.00 x 3.20 x 1.20 (mm)

PACKAGE DIMENSIONS

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

PIN	CONNECTION
1	Tri-State or No Connect
2	No Connect
3	Ground/Case
4	Output
5	Complementary Output
6	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.

PE5-Series 5.00 x 3.20 x 1.20 (mm)

1. Material: Black Conductive Polystyrene or equivalent.
2. 10 Sprocket Hole pitch cumulative tolerance of ± 0.008 .
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.

