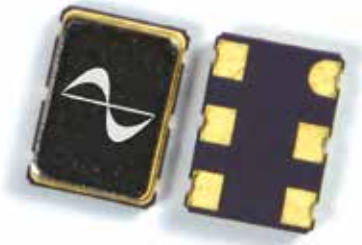


PE7-Series Specifications

7.00L x 5.00W x 1.80H (mm)



PDI Model *PE7-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) **PE7-T-50000X-M-C-A-2-R-X***

ENABLE

T = Tri-State
N = No/Connect

FREQUENCY

40000X-99999X =
40.0000 MHz –
99.999 MHz
C10000-C20000 =
100.00 MHz –
200.00 MHz

OUTPUT

P = LVPECL

FREQUENCY STABILITY

B = ±25 **
C = ±50
D = ±100
S = Special

OPERATING TEMPERATURE

A = 0 to +70°C
B = -20 to +70°C
D = -40 to +85°C
E = -55 to +125°C
S = Special

SUPPLY VOLTAGE

2 = 2.5
3 = 3.3

PACKAGE

R = Tape & Reel

** - Not available -55 to +125°C

* - for standard or assigned for customization.

Parameter	Supply Voltage *1 (±5%)		Units	
	3.3	2.5		
Frequency Range *1	40.000000 to 200.000000		MHz	
Frequency Stability *1	All Causes (Maximum) *2		ppm	
Temperature Range *1	Operating		°C	
	Storage		-55 to +125	
Supply Current (Maximum)	65		mA	
Output	Differential PECL Squarewave			
Load (Typical)	Into Vcc-2V		Ω	
Duty Cycle (Maximum)	@ 50% Vcc		%	
Rise/Fall Times (Maximum)	Rise Time (20% to 80% Vcc)		nS	
	Fall Time (80% to 20% Vcc)			
Start up Time (Maximum)	10.0		mS	
Output Voltage Levels	High Voh (50Ω to Vcc-2V)		V	
	Low Vol (50Ω to Vcc-2V)			
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
Integrated Phase Jitter (RMS)	12KHz to 20MHz		pS	
	0.2 Typical , 1.0 Maximum			
Phase Noise (Typical)	@ 10KHz Offset		dBc/Hz	
	@ 100KHz Offset			

*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

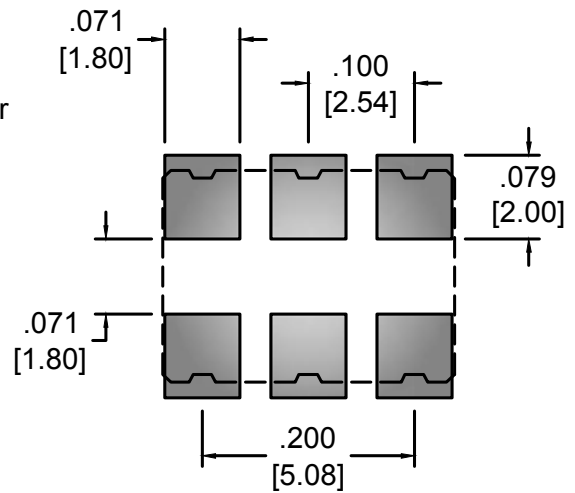
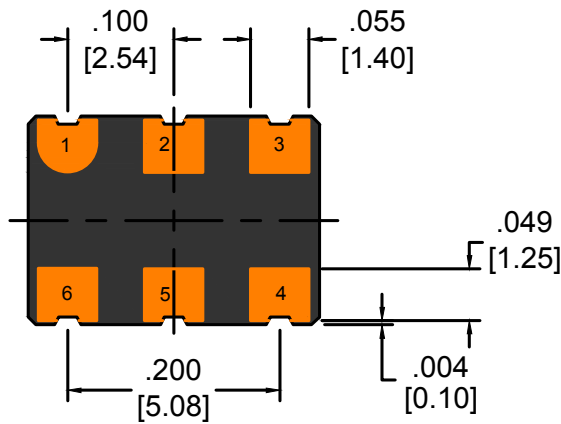
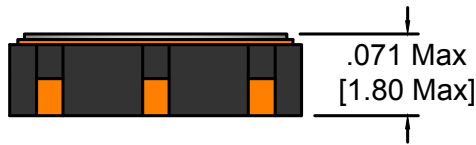
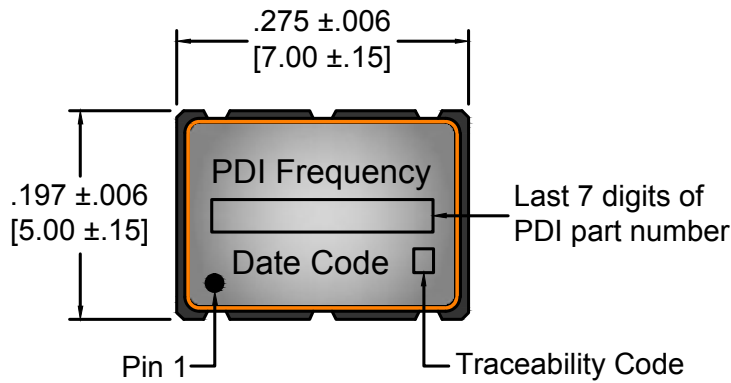


PE7-Series 7.00 x 5.00 x 1.80 (mm)

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.

PE7-Series 7.00 x 5.00 x 1.80 (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.

