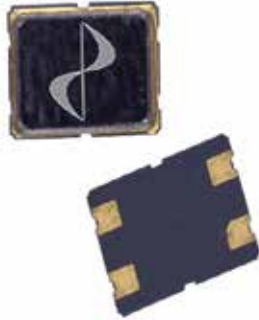


# C7-Series Specifications



**7.00L x 5.00W x 1.30H (mm)**

PDI C7-Series is a hermetically sealed quartz crystal in a seam-welded ceramic SMT package. This crystal, designed to meet your most demanding specification, is available in standard or custom frequencies and/or with customized parameters. PDI provides quick-turn sampling for your proto-typing needs, mass production capability, and competitive pricing.

ex) **C7-25000X-F-B-C-B-18-2-X\***

\* (X) for standard or assigned for customization.

<b>FREQUENCY</b> 05500X – 99999X = 5.5000MHz - 99.999MHz - C10000 – C11000 = 100.00MHz - 110.00MHz -	<b>MODE</b> F = Fundamental 3 = 3rd Overtone	<b>TOLERANCE @ 25°C</b> A = ±10 B = ±25 C = ±50 S = Special	<b>FREQUENCY STABILITY</b> B = ±25 C = ±50 E = ±100 S = Special	<b>OPERATING TEMPERATURE</b> A = 0 to +70°C B = -20 to +70°C D = -40 to +85°C S = Special	<b>LOAD</b> 08-99 = pF SE = Series	<b>PAD CONFIG</b> 2 = 2 Pads 4 = 4 Pads
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See below for legacy part numbering configuration for parts designed prior to 02-01-2014, which are still available

Parameter	Mode		Units
	Fundamental	3rd Overtone	
Frequency Range *1	5.500000 to 60.000000	40.000000 to 110.000000	MHz
Frequency Tolerance	@ +25°C	Per Option	ppm
Temperature Range *1	Operating	Per Option	°C
	Storage	- 55 to +125	°C
Frequency Stability *1	Over Operating Temperature	Per Option	ppm
Equivalent Series Resistance (Maximum)	5.500000 to 8.000000 MHz	100	N/A
	8.000000 to 10.000000 MHz	60	N/A
	10.000000 to 14.000000 MHz	50	N/A
	14.000000 to 20.000000 MHz	40	N/A
	20.000000 to 60.000000 MHz	30	N/A
	40.000000 to 110.000000 MHz	N/A	80
Drive Level (Typical)	100		uW
Shunt Capacitance (Maximum)	5.0		pF
Load Capacitance (Typical)	Per Option		pF
Aging (Maximum)	Per Year	±5.0	ppm
Seal Method	Seam Weld		
Insulation Resistance	500MΩ Minimum @100Vdc ±15V		

\*1 - Not all Frequency/Stability/Temperature combinations are available

## Legacy Part Numbering Configuration

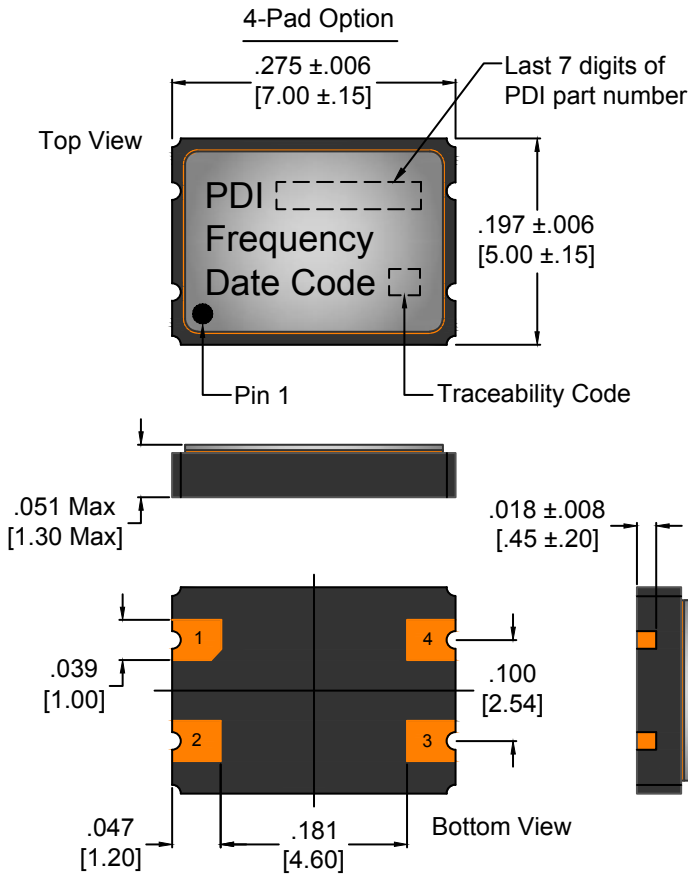
ex) **C7-25000X-F-C-B-18-R-X\***

<b>FREQUENCY</b> 06000X – 99999X = 6.0000MHz - 99.999MHz - C10000 – C12500 = 100.00MHz - 125.00MHz -	<b>MODE</b> F = Fundamental 3 = 3rd Overtone	<b>FREQUENCY STABILITY</b> B = ±25 C = ±50 D = ±100 S = Special	<b>OPERATING TEMPERATURE</b> A = 0 to +70°C B = -20 to +70°C D = -40 to +85°C S = Special	<b>LOAD</b> 08-99 = pF SE = Series	<b>PACKAGE</b> R = Tape & Reel
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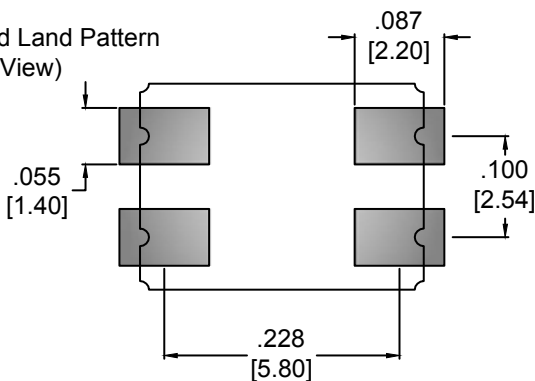
# C7-Series 7.00 x 5.00 x 1.30 (mm)

## PACKAGE DIMENSIONS

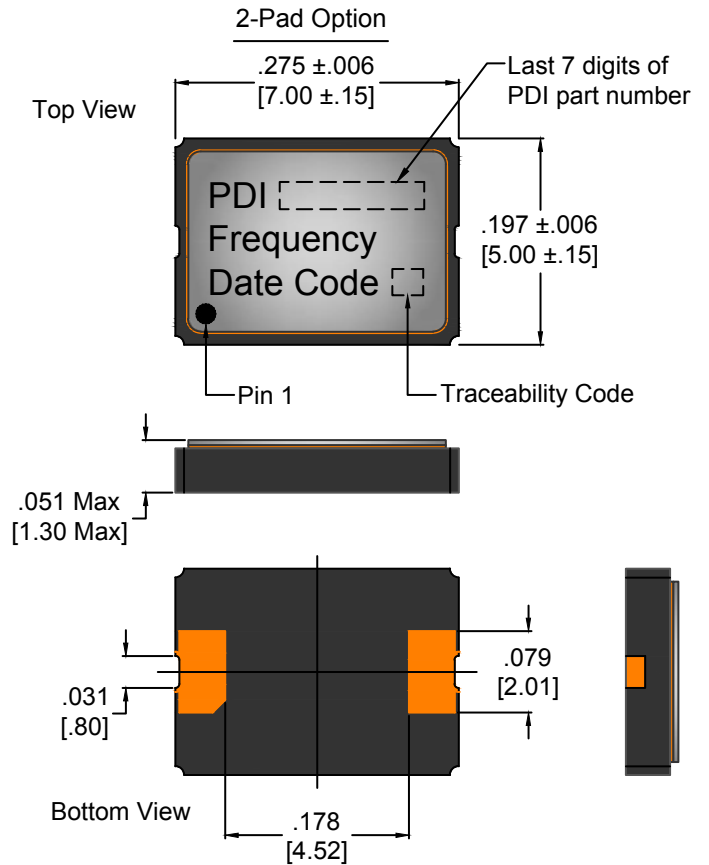
Decimal XXX = ± .008, XX = ± .02 Metric [XXX = ± .20], [XX = ± .50]



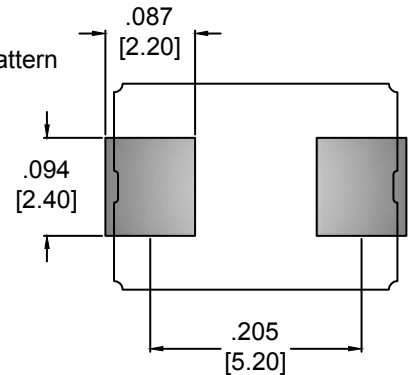
Recommended Land Pattern (Top View)



PIN	CONNECTION
1	Crystal
2	Ground/Cover
3	Crystal
4	Ground/Cover



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.

# C7-Series 7.00 x 5.00 x 1.30 (mm)

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

