

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.

FREQUENCY

05500X – 99999X =
5.5000MHz -
99.999MHz -
C10000 – C11000 =
100.00MHz -
110.00MHz -

MODE

F = Fundamental
3 = 3rd Overtone

TOLERANCE @ 25°C

A = ±10
B = ±25
C = ±50
S = Special

FREQUENCY STABILITY

B = ±25
C = ±50
E = ±100
S = Special

OPERATING TEMPERATURE

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

LOAD

08-99 = pF
SE = Series

PAD CONFIG

2 = 2 Pads
4 = 4 Pads

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	Ω
	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***

FREQUENCY

06000X – 99999X =
6.0000MHz -
99.999MHz -
C10000 – C12500 =
100.00MHz -
125.00MHz -

MODE

F = Fundamental
3 = 3rd Overtone

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
S = Special

LOAD

08-99 = pF
SE = Series

PACKAGE

R = Tape & Reel

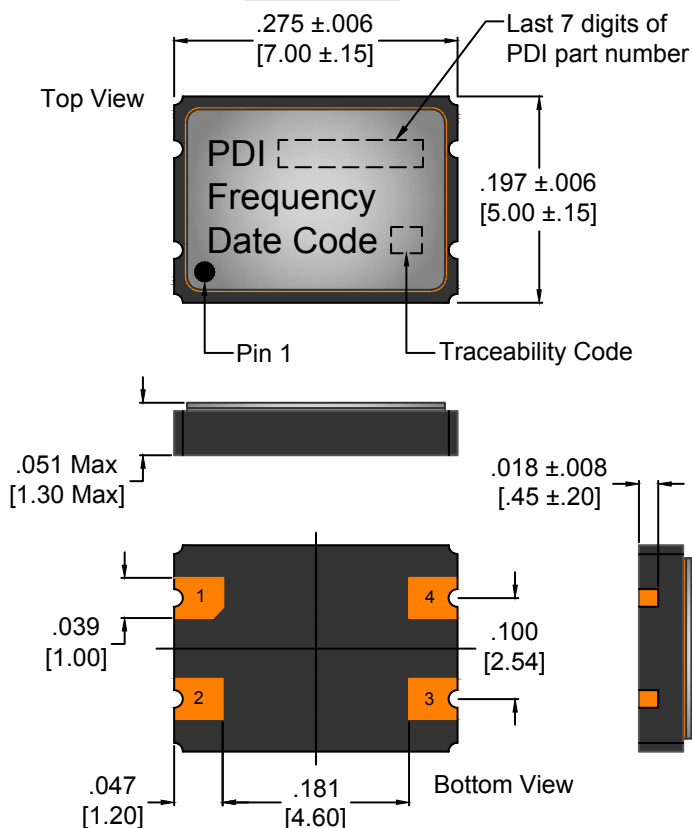
C7-Series 7.00 x 5.00 x 1.30 (mm)



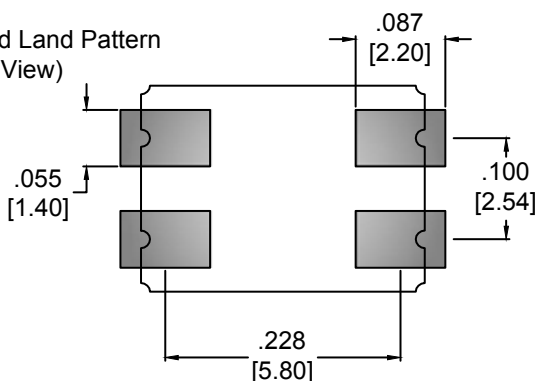
PACKAGE DIMENSIONS

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

4-Pad Option

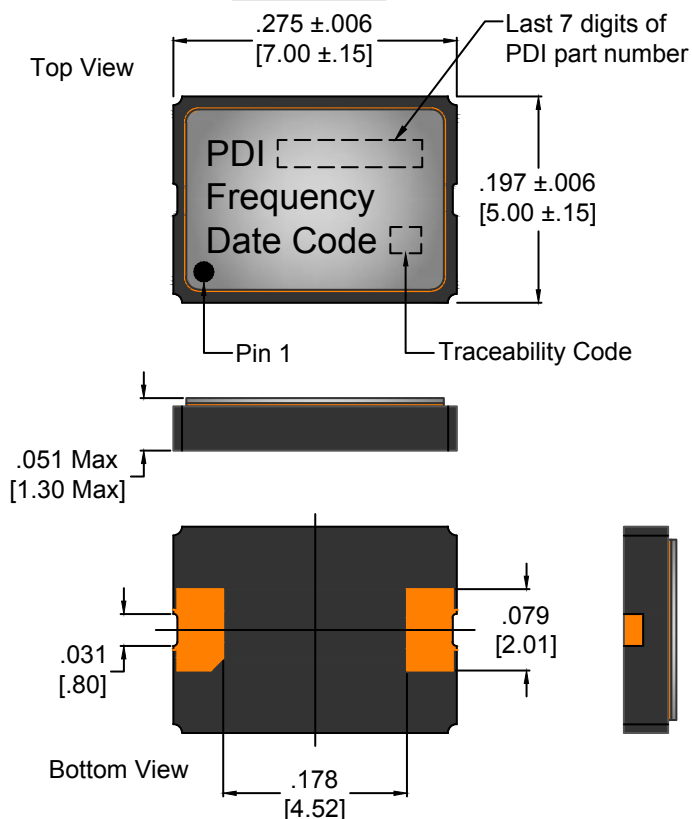


Recommended Land Pattern (Top View)

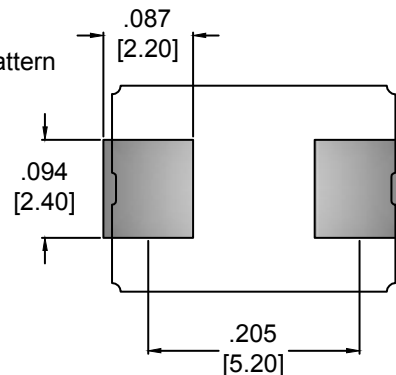


PIN	CONNECTION
1	Crystal
2	Ground/Cover
3	Crystal
4	Ground/Cover

2-Pad Option



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 ± 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.

