

C3-Series Specifications



3.20L x 2.50W x 0.80H (mm)

PDI C3-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) **C3—25000X—F—B—C—B—18—R—X***

*(X) for standard or assigned for customization.

FREQUENCY

12000X – 99999X =
12.000MHz -
99.999MHz -
C10000 – C15000 =
100.00MHz -
150.00MHz -

MODE

F = Fundamental
3 = 3rd Overtone

TOLERANCE @ 25°C

A = ±10
B = ±25
C = ±50
S = Special

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

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		12.000000 to 60.000000	60.000000 to 150.000000	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)	12.000000 to 16.000000 MHz	100	N/A	Ω
	16.000000 to 20.000000 MHz	80	N/A	
	20.000000 to 24.000000 MHz	60	N/A	
	24.000000 to 60.000000 MHz	40	N/A	
	60.000000 to 150.000000 MHz	N/A	100	
Drive Level (Typical)		10		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) **C3—25000X—F—C—B—18—R—X***

FREQUENCY

12000X – 67500X =
12.000MHz -
67.500MHz -

MODE

F = Fundamental

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

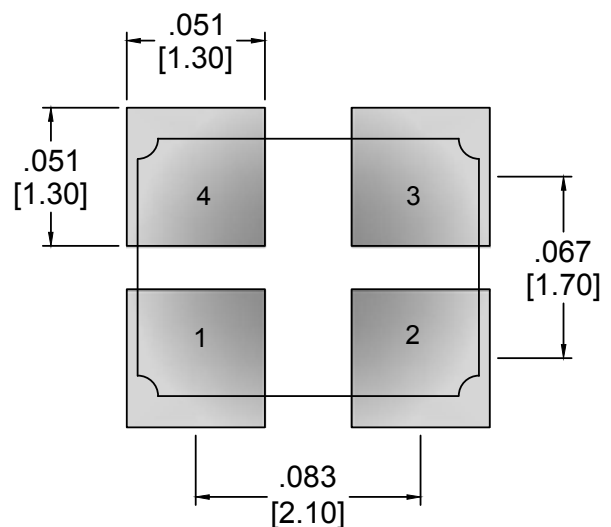
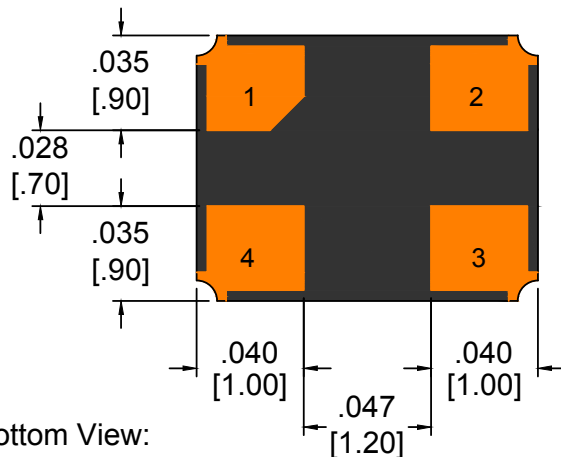
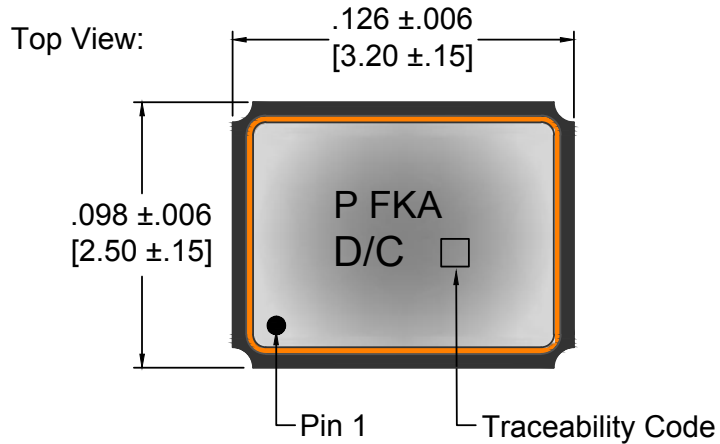
C3-Series 3.20 x 2.50 x 0.80 (mm)



PACKAGE DIMENSIONS

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

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.

C3-Series 3.20 x 2.50 x 0.80 (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.

