

C5-Series Specifications



5.00L x 3.20W x 0.90H (mm)

PDI C5-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) **C5-25000X-F-B-C-B-18-2-X***

* (X) for standard or assigned for customization.

FREQUENCY	MODE	TOLERANCE @ 25°C	FREQUENCY STABILITY	OPERATING TEMPERATURE	LOAD	PAD CONFIG
08000X – 99999X = 8.0000MHz - 99.999MHz - C10000 – C12500 = 100.00MHz - 125.00MHz -	F = Fundamental 3 = 3rd Overtone	A = ±10 B = ±25 C = ±50 S = Special	B = ±25 C = ±50 E = ±100 S = Special	A = 0 to +70°C B = -20 to +70°C D = -40 to +85°C S = Special	08-99 = pF SE = Series	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	8.000000 to 50.000000	40.000000 to 125.000000	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)	8.000000 to 10.000000 MHz	100	N/A
	10.000000 to 12.000000 MHz	80	N/A
	12.000000 to 16.000000 MHz	60	N/A
	16.000000 to 20.000000 MHz	50	N/A
	20.000000 to 24.000000 MHz	40	N/A
	24.000000 to 50.000000 MHz	30	N/A
40.000000 to 125.000000 MHz	N/A	80	Ω
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

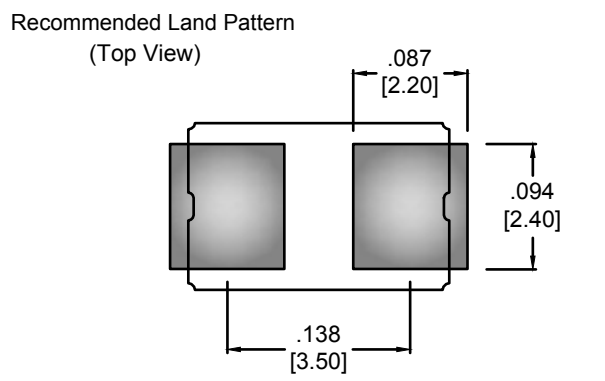
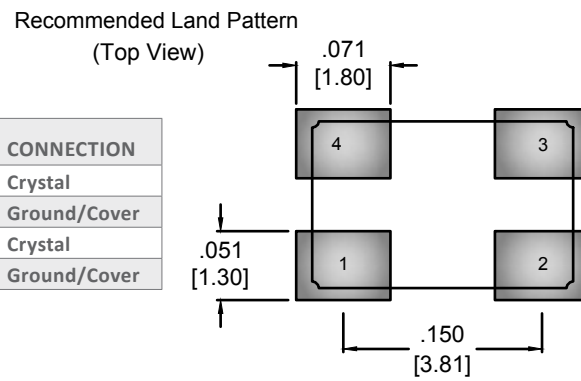
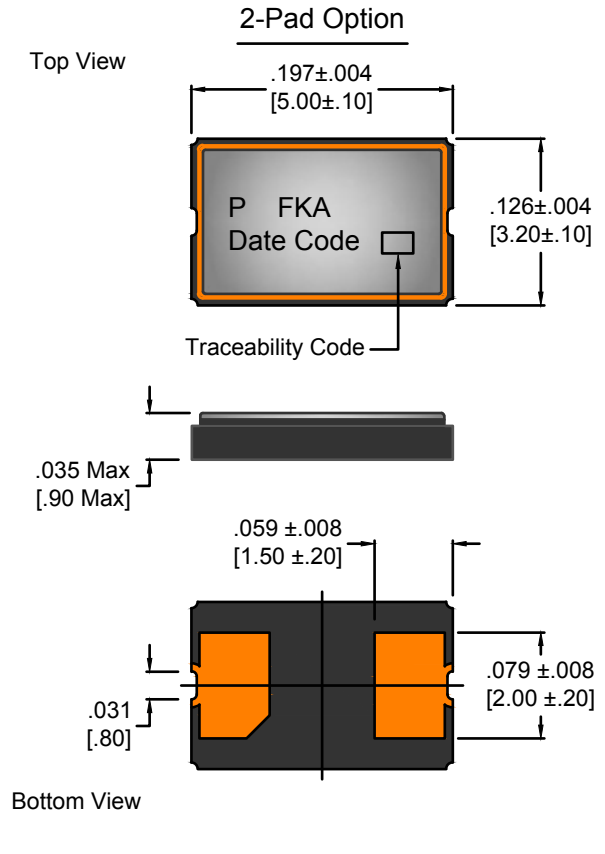
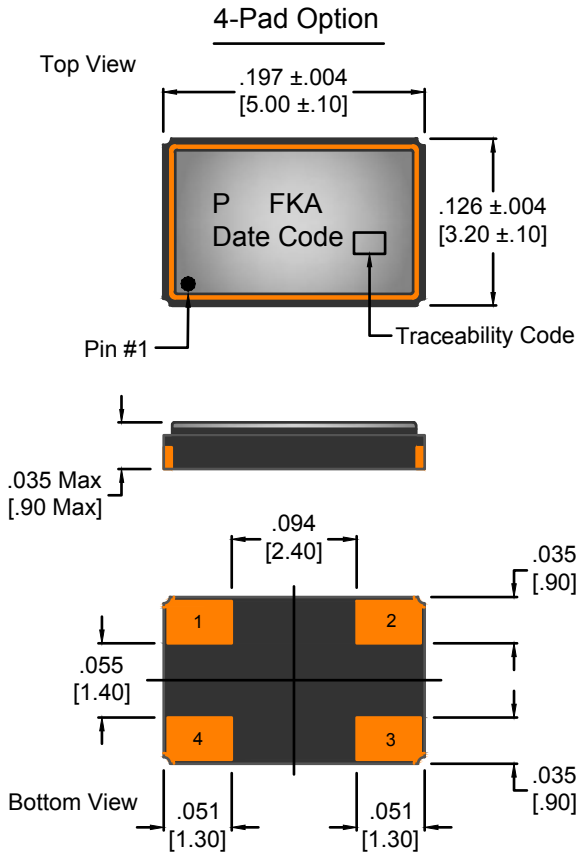
ex) **C5-25000X-F-C-B-18-R-X***

FREQUENCY	MODE	FREQUENCY STABILITY	OPERATING TEMPERATURE	LOAD	PACKAGE
10000X – 99999X = 10.000MHz - 99.999MHz - C10000 – C12500 = 100.00MHz - 125.00MHz -	F = Fundamental 3 = 3rd Overtone	B = ±25 C = ±50 D = ±100 S = Special	A = 0 to +70°C B = -20 to +70°C D = -40 to +85°C S = Special	08-99 = pF SE = Series	R = Tape & Reel

C5-Series 5.00 x 3.20 x 0.90 (mm)

PACKAGE DIMENSIONS

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



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



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.

C5-Series 5.00 x 3.20 x 0.90 (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.

