

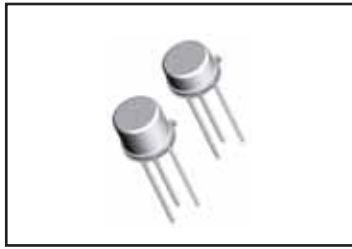
EXTREME ENVIRONMENT

SMD HIGH-TEMPERATURE PACKAGED CRYSTALS

FMXTHT05 SERIES

Extreme Temperature
Packaged Crystals

T0-5 & TO-5 Low Profile



- 3.9 MHz to 125 MHz
- High-Shock & Vibration
- Standard Stability from ± 70 ppm
- Low Profile TO-5 Option Available
- Specify Custom Stabilities from -55°C to $+220^{\circ}\text{C}$

SPECIFICATIONS

Issue 2 | 09092011



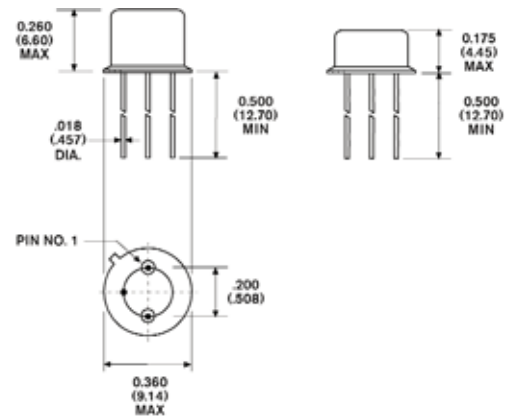
Specification Parameters	Performance / Range
Frequency Range	*3.90 MHz to 125.000 MHz
Operation Mode	See Operation Mode and ESR Table
Load Capacitance (CL)	18pF Std, 8 - 60pF and Series available
Frequency Tolerance	± 50 ppm @ 25°C , Custom Options available
Temperature Tolerance	± 250 ppm Std, ± 70 ppm to ± 300 ppm available
Operating Temperature	0 to 200°C Std, Custom Options available
Storage Temperature	-55°C to $+240^{\circ}\text{C}$ Standard
Equivalent Series Resistance (ESR)	See Operation Mode and ESR Table
Shunt Capacitance (CO)	7pF max
Drive Level	50 μW typical, 1mW max
Aging @ $+25^{\circ}\text{C}$	± 5 ppm per year
Shock	1000g, 1 msec, Standard
Vibration - Random	20g RMS 10 Hz to 2 kHz Random, Standard
Screening / Testing Available	per MIL-3098

All specifications subject to change without notice.

*Note: For frequencies less than 3.9 MHz use Crystal Oscillator in 5x7mm or 7x7mm package.

- High Pullability
- AT, IT, or SC Cut Crystals
- Extended Operating Temp. Range from -150°C to $+300^{\circ}\text{C}$ Available
- Swept Quartz Option

TO-5 & TO-5 Low Profile



Pin Configuration

Pin	Function
1	Connect
5	Connect
7	No-Connect
All other pins: not available	

Note: Pin 3 available upon request
8 Pin version available upon request

Dimensions: in / (mm)

Operation Mode and ESR Table

Freq (MHz)	Mode	MAX ESR
3.9 - 4.1	Fundamental	150
4.2 - 4.9	Fundamental	100
5.0 - 7.9	Fundamental	80
8.0 - 14.9	Fundamental	50
15.0 - 39.0	Fundamental	25
31.0 - 42.0	Fundamental	35
24.0 - 59.9	3rd Overtone	40
60.0 - 81.9	3rd Overtone	50
82.0 - 104.9	3rd Overtone	60
105.0 - 125.0	3rd Overtone	70

Material

Base & Leads: Nickel Plated Kovar*
Lid: Stainless Steel

*note: leads w/ gold flash available

related product:

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