## HIGH TEMPERATURE

THROUGH-HOLE PACKAGED CRYSTALS

# **FMXTHTMB**series

High Temperature Packaged Crystal Resonators

**HC-49/US** 



- Designed and Manufactured for Reliable High Temperature Operation
- **3.5 MHz to 90 MHz**
- Specify Custom Stabilities from 0°C to +200°C

### SPECIFICATIONS



Specification Parameters	Performance / Range
Frequency Range	*3.50 MHz to 90.00 MHz
Operation Mode	See Operation Mode and ESR Table
Load Capacitance (CL)	18pf Std, 8 - 60pF and Series Mode available
Frequency Tolerance	±50ppm @ 25°C, Options ±15ppm to ±50ppm
Temperature Tolerance	±250ppm Std, ±100ppm to ±300ppm available
Operating Temperature	0 to 200°C Std, Custom Options available
Storage Temperature	-55°C to +240°C Standard
Equivalent Series Resistance (ESR)	See Operation Mode and ESR Table
Shunt Capacitance (CO)	7pF max
Drive Level	50µW typical, 1mW max
Aging @ +25°C	±5ppm per year
Screening / Testing Available	per MIL-3098

All specifications subject to change without notice.

\*Note: Check with factory for lower frequencies.

related product:
Extremely Linear <b>Temperature Sensors</b> for High-Temperature Applications Now Available.

#### **Operation Mode and ESR Table**

Freq (MHz)	Mode	MAX ESR
3.5 - 4.9	Fundamental	180
5.0 - 5.9	Fundamental	100
6.0 - 7.9	Fundamental	80
8.0 - 9.9	Fundamental	70
10.0 - 14.9	Fundamental	60
15.0 - 44.0	Fundamental	40
27.0 - 49.9	3rd Overtone	80
50.0 - 90.0	3rd Overtone	70

FMI continuously performs life test		
on high temperature products.		
nquire about the life test relevant		
o your specific application.		

Material
Base & Leads: Nickel Plated Copper
Lid: Steel

#### Package Outline Drawing



Pin Configuration		
Pin	Function	
1	Connect	
2	Connect	

#### STANDARD MARKING



Dimensions: in / (mm)

Issue 1 | 03182014

#### PLEASE CONTACT US FOR PART NUMBERS, HOW TO ORDER, ADDITIONAL PRODUCT SPECIFICATIONS & OR WITH YOUR CUSTOM REQUIREMENTS



FREQUENCY MANAGEMENT | INTERNATIONAL 15302 Bolsa Chica Street Huntington Beach, CA 92649 ph (714) 373-8100 | fx (714) 373-8700 1-714-373-8100 1-800-800-XTAL [9825] www.fmi-inc.com