

# EXTREME ENVIRONMENT

## THRU-HOLE HIGH-TEMPERATURE VCXOs

### FMVCHT8 SERIES

Extreme Temperature  
Voltage Controlled Crystal Oscillators

### 8 Pin DIP - VCXO



- 500 kHz to 70 MHz
- 2.5V, 2.8V, 3.3V, 5V, & 8V
- High-Shock & Vibration
- -55°C to +210°C
- Extended Operating Life

### SPECIFICATIONS

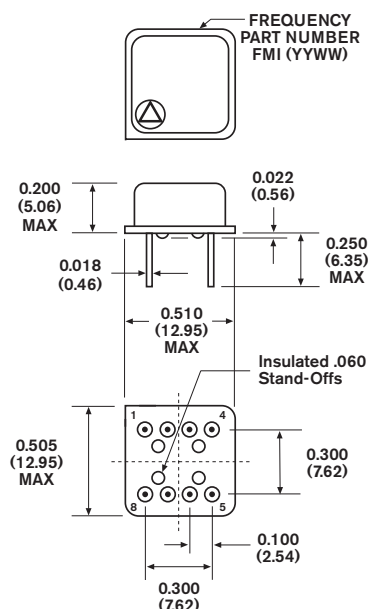


Parameter	Specification
Frequency Range	500 kHz to 70.00 MHz
Operating Temperature Range	-55°C to +210°C, Customer Specified
Overall Frequency Tolerance vs. Temperature	<i>typical:</i> ±100ppm, ±150ppm, ±175ppm, and ±250ppm <i>example:</i> ±200ppm; -40°C to +200°C <i>example:</i> ±250ppm; -40°C to +210°C <i>example:</i> ±60ppm; 0°C to +200°C
<i>Customer Specified &amp; Temperature Range Dependent- (please inquire, call the factory)</i>	
Storage Temperature	-100°C to +235°C
Supply Voltage	+2.5V, +2.8V, +3.3V, +5V, +8V (all ± 10%) Inquire about lower voltage options
Supply Current	2mA to 15mA, dependant on frequency & voltage
Rise and Fall Time (voltage, load & freq. dependent)	1~6 nsec, dependant on frequency & voltage
Start-up Time	10 ms max. < 5 ms typical
Output	CMOS, (SOI Option, please inquire)
Output Load	10K Ohm    15 pF Load
Output Logic	Logic "1": 0.9* Vcc min Logic "0": 0.1*Vcc max
Symmetry	40/60 to 48/52% at Vcc/2 and specified load
Output Enable Options	Enabled on Logic "1" (requires all 8 pins)
Screening / Testing Available	per MIL-PRF-55310

**Established and Guaranteed Long-Term Operating Life at the Extreme High-Temperature**

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

#### 8 Pin DIP



#### PACKAGE OPTIONS

- 8 Lead Version
- 4 or 8 Lead Version with Gullwing, J-Lead, Flat J-Lead; Lead forming, please inquire
- 14 Pin DIP

#### STANDARD CONTROL VOLTAGE OPTIONS

Control Voltage	Pullability	Pullable Temperature Range
0 to +2.5V	+/-150ppm min	-55°C to +175°C
0 to +3.3V	+/-200ppm min	-55°C to +205°C
.5 to 4.5V	+/-225ppm min	-55°C to +205°C

note: other control voltage options available - please consult us

#### PIN FUNCTION TABLE

Pad	Function
1	Control Voltage
4	Ground (Case)
5	Output
8	Supply Voltage (Vcc)

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

All specifications subject to change without notice.

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



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