

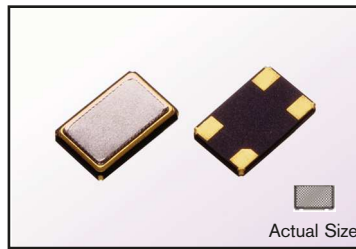
# EXTREME ENVIRONMENT

## SMD HIGH-TEMPERATURE CRYSTAL OSCILLATORS

### FMOCHT3S<sup>SERIES</sup>

Extreme Temperature  
Crystal Oscillators

**CERAMIC SMD 5x3.2**



- 16 kHz to 80 MHz
- +1.6 Volts To +5 Volts
- High-Shock & Vibration
- -100°C to +210°C
- Extended Operating Life

### SPECIFICATIONS



Parameter	Specification
Frequency Range*	16.00 kHz to 80.00 MHz
Operating Temperature Range	-100°C to +210°C, Customer Specified
Overall Frequency Tolerance vs. Temperature	typical: $\pm 100$ ppm, $\pm 150$ ppm, $\pm 175$ ppm, and $\pm 250$ ppm example: $\pm 200$ ppm; -40°C to +200°C example: $\pm 250$ ppm; -40°C to +210°C example: $\pm 120$ ppm; 0°C to +175°C
Customer Specified & Temperature Range Dependent- (please inquire, call the factory)	
Storage Temperature	-100°C to +235°C
Supply Voltage	+1.6V, +1.8V, 2.5V, 3.3V, 5V (all $\pm 10\%$ ) Inquire about lower voltage options.
Supply Current	See table below (inquire on extreme low-power)
Rise and Fall Time (voltage, load & freq. dependent)	1~10 nsec
Start-up Time	10 ms max. < 5 ms typical
Output	CMOS
Output Enable Options	Enabled on Logic "1"
Screening / Testing Available	per MIL-PRF-55310

\*note. For frequencies outside of the standard range, please contact us.

**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.

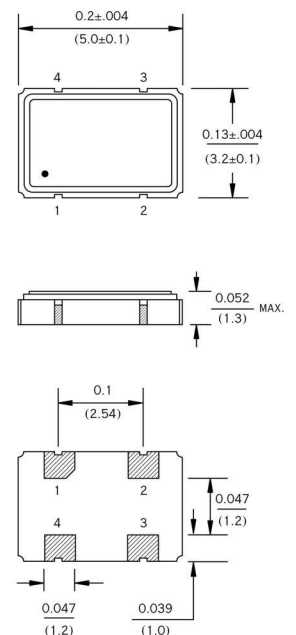
Voltage	SUPPLY CURRENT (mA)				
	Frequency				
	16 kHz	32.768 kHz	5 MHz	16 MHz	24 MHz
+2.5V	0.125	0.25	0.8	2.5	4.5
+3.3V	0.23	0.45	1.2	4.0	6.0
+5.0V	0.6	1.1	2.6	8.0	11.0

#### PIN FUNCTION TABLE

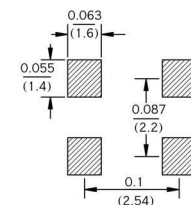
Pad	Function
1	NC or Tri-state
2	Ground (Case)
3	Output
4	Supply Voltage (Vcc)

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

#### CERAMIC SMD



#### RECOMMENDED LAND PATTERN



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