

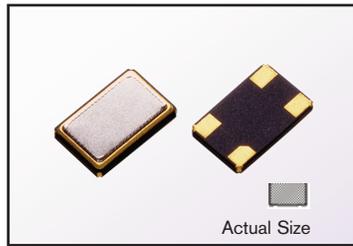
EXTREME ENVIRONMENT

SMD HIGH-TEMPERATURE PRECISION CRYSTAL OSCILLATORS

FMOCHT3SP SERIES

Extreme Temperature
Precision Crystal Oscillators

CERAMIC SMD 5x3.2



- Best-In-Class Accuracy
- 20 kHz to 80 MHz
- +1.6 Volts To +5 Volts
- High-Shock & Vibration
- Lowest Power Consumption
- Extended Operating Life

SPECIFICATIONS



Parameter	Specification
Frequency Range*	20.00 kHz to 80.00 MHz
Operating Temperature Range	-100°C to +210°C, Customer Specified
Overall Frequency Tolerance vs. Temperature	<i>typical:</i> ±40 ppm, ±50 ppm, ±75 ppm, and ±100 ppm <i>example:</i> ±40 ppm; -40°C to +175°C <i>example:</i> ±50 ppm; -40°C to +200°C <i>example:</i> ±75 ppm; -55°C to +200°C <i>example:</i> ±100 ppm; -40°C to +210°C
<i>Customer Specified & Temp Range Dependent (please inquire, call the factory)</i>	
Storage Temperature	-100°C to +220°C
Supply Voltage	+1.6V, +1.8V, 2.5V, 3.3V, 5V (all ± 10%) Inquire about lower voltage options
Supply Current	See table below (inquire on extreme low-power)
Rise and Fall Time	2~10 nsec depending on voltage, load & frequency
Start-up Time	10 ms max. < 5 ms typical
Output	CMOS
Output Enable Options	Enabled on Logic "1"
Screening / Testing Available	Standard HiTemp Screening or 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

Operating Life is 1200 hours minimum at +200°C is our standard specification

FMI continuously performs life test on high temperature products.

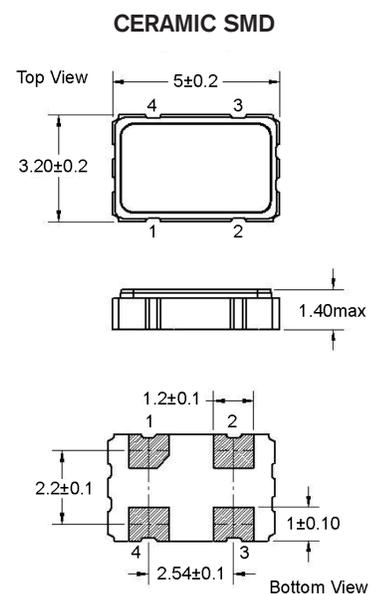
Inquire about the life test relevant to your specific application.

Voltage	SUPPLY CURRENT (mA)					
	Frequency					
	32.768 kHz	2 MHz	12 MHz	20 MHz	30 MHz	40 MHz
+1.8V	0.015	0.7	0.7	0.7	0.8	1
+3.3V	0.018	0.8	1	1	1.3	1.6
+5.0V	0.85	2.8	2.8	3.5	4.8	5.5

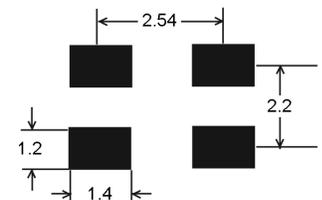
PIN FUNCTION TABLE

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

All specifications subject to change without notice.



Recommended Land Pattern



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

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