

CRYSTAL

4.0 X 2.5mm CERAMIC SURFACE MOUNT CRYSTAL



XM-4B-Series

ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-55	-	125	°C	

ELECTRICAL SPECIFICATIONS

TABLE 2.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Frequency Range	(Fo)	13	-	50	MHz	
Frequency Calibration @ 25°C		±10	-	±100	ppm	1
Frequency Tolerance:		±10	-	±100	ppm	2
Operating Temperature Range		-10	-	60	°C	
Mode			Fundamental			
Shunt Capacitance	(Co)	-	-	7.0	pF	
Equivalent Series Resistance		-	-	80	Ohm	
Load Capacitance	(CL)	-	16	-	pF	
Drive Level		-	-	100	u Watts	

ENVIRONMENTAL CHARACTERISTICS

TABLE 3.0

Package	Hermetically Sealed Ceramic Package.
Aging (First year maximum)	+/-5ppm
Shock Resistance (Maximum)	+/-5ppm Test standard: free drop onto a hard wooden board from a height of 75cm, 3 times.
Vibration Resistance (Maximum)	+/-5ppm Test standard: Frequency from 10 to 500 Hz, amplitude at 1.5mm or 10G which ever is smaller each plane X, Y and Z.
Insulation Resistance (Minimum)	500 M ohm minimum at 100 +/-15 Vdc.
Leakage	0.01ppm atm. cc/sec. maximum

Notes

- 1) Available calibration tolerances; please specify calibration in the part number.
- 2) Tolerances less than +/-100ppm frequency stability is referenced to the frequency measured at 25°C. +/-100 ppm tolerance is all inclusive of calibration @ 25°C, frequency vs. temperature stability and aging. Please specify the tolerance in the part number.

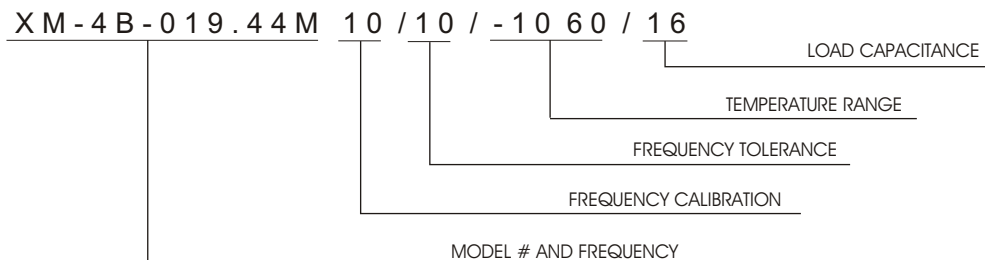
DESCRIPTION

The Connor-Winfield XM-4B-Series is a fundamental surface mount Crystal, designed for applications requiring small packaged tight tolerance fundamental crystals. The surface mount package is designed for high-density mounting and is optimum for mass production.

FEATURES

- FUNDAMENTAL MODE CRYSTAL
- TEMPERATURE RANGE: -10 to 60°C
- SURFACE MOUNT PACKAGE
- TAPE AND REEL PACKAGING
- RoHS COMPLIANT / LEAD FREE

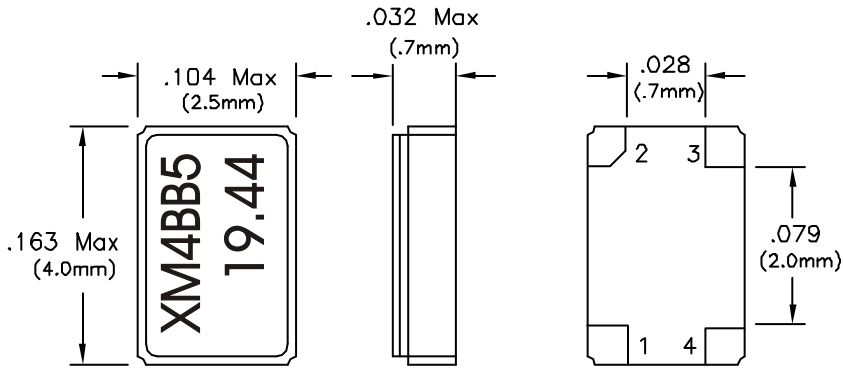
ORDERING INFORMATION



Specifications subject to change without notice.

CRYSTAL

Package Outline

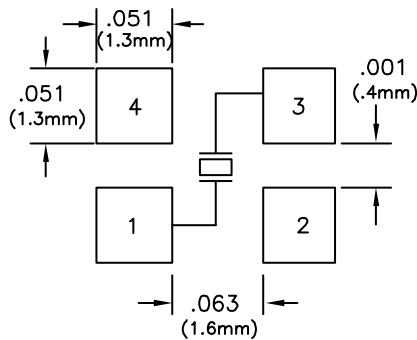


Dimensional Tolerance: $\pm .008''$
 $\pm 0.2\text{mm}$

Marking

XM4B = XM-4B
B5 = DATE CODE
19.44 = 19.44MHz

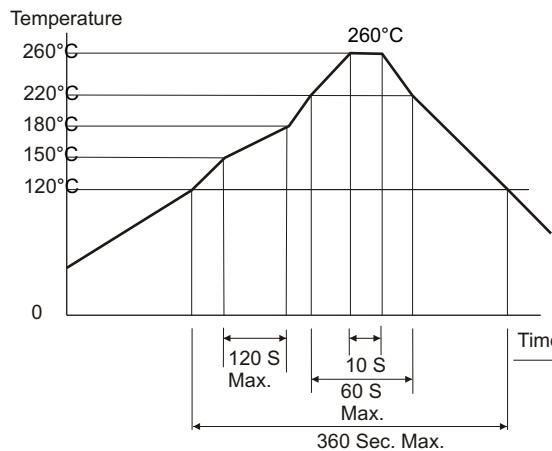
Suggested Pad Layout



Pin Connections

Pin	Connection
1	Crystal Connection
2	N/C Case Ground
3	Crystal Connection
4	N/C Case Ground

Solder Profile



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