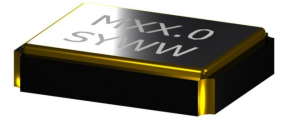


# X Series Crystal



- 2mm X 2.5mm 4 Pads Ceramic Package
- Ultra-miniature Profile
- RoHS Compliant
- Tape and Reel Packaging



Frequency Range	16.000MHZ to 60.000MHZ
Frequency Tolerance / Stability	(See Part Number Guide for Options)
Operating Temperature Range	(See Part Number Guide for Options)
Storage Temperature	-40°C to +85°C
Aging	±2ppm / per year
Shunt Capacitance	3pF Maximum
Load Capacitance	(See Part Number Guide for Options)
Equivalent Series Resistance	See ESR Chart
Drive Level	100µW Maximum
Insulation Resistance	500 Megaohms Minimum at 100VDC

## Environmental & Mechanical Detail

Shock	MIL-STD-883, Method 2002 Cond B
Solderability	MIL-STD-883, Method 2003
Solvent Resistance	MIL-STD-202, Method 215
Vibration	MIL-STD-883, Method 2007, Cond A
Gross Leak Test	MIL-STD-883, Method 1014, Cond C
Fine Leak Test	MIL-STD-883, Method 1014, Cond A
MSL	Level 1 per IPC/JEDEC J-STD 20

## Marking Detail

First Line = MXX.X		
M	=	MMD
XX.X	=	Frequency
Second Line = SYWW or SSYWW		
S or SS	=	Internal Code
YWW	=	Date Code (Year/Work Week)

**QUALITY SYSTEM  
CERTIFIED  
= ISO 9001 =**

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