

# I Series Crystal



- 6.0mm x 3.5 mm 2 Pads Ceramic Package
- Tight Tolerance and Stability
- Wide Frequency Range
- Tape and Reel Packaging



## ELECTRICAL SPECIFICATIONS:

Frequency Range	10.000MHZ to 80.000MHZ
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	±5ppm per year max
Shunt Capacitance	7pF max
Load Capacitance	20pF Standard (See Part Number Guide for Options)
Equivalent Series Resistance	See ESR Chart
Mode of Operation	Fundamental / 3 <sup>rd</sup> OT
Drive Level	100µW max
Insulation Resistance	500 M ohms min at 100VDC ±15VDC
Shock	MIL-STD-883, Meth 2002, Cond B
Solderability	MIL-STD-883, Meth 2003
Solvent Resistance	MIL-STD-202, Meth 215
Vibration	MIL-STD-883, Meth 2007, Cond A
Gross Leak Test	MIL-STD-883, Meth 1014, Cond C
Fine Leak Test	MIL-STD-883, Meth 1014, Cond A

## ESR CHART:

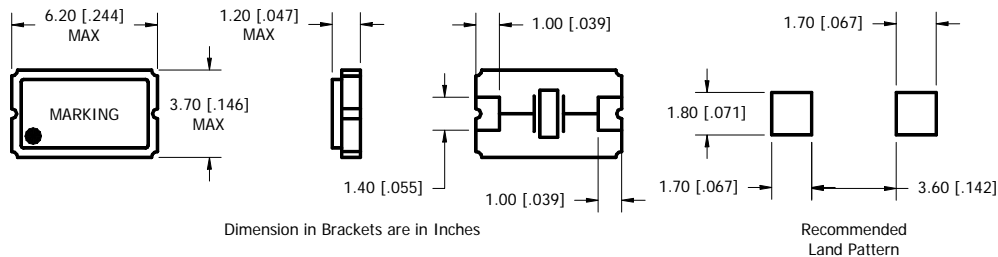
Frequency Range	ESR (Ohms)	Mode / Cut
10.000MHZ to 10.999MHZ	100 max	Fund / AT
11.000MHZ to 11.999MHZ	80 max	Fund / AT
12.000MHZ to 15.999MHZ	60 max	Fund / AT
16.000MHZ to 39.999MHZ	40 max	Fund / AT
40.000MHZ to 80.000MHZ	70 max	3 <sup>rd</sup> OT/ AT

## MARKING:

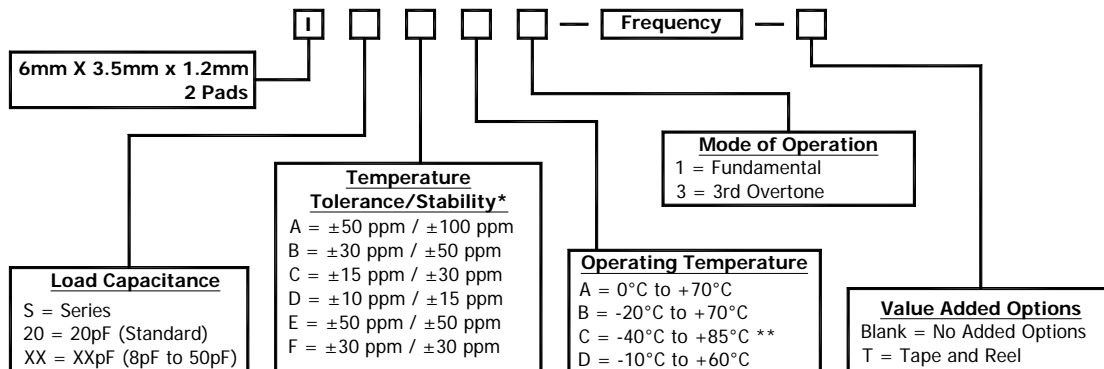
Line 1: MXX.XXX  
XX.XXX = Frequency in MHz

Line 2: SYMCLL  
S = Internal Code  
YM = Date Code (Year/Month)  
CC = Crystal Parameters Code  
L = Denotes RoHS Compliant

## MECHANICALS DETAIL:



## PART NUMBER GUIDE:



\* Please consult with MMD sales department for any other parameters or options.  
\*\* Not all Frequency Tolerance/Stability options available at this temperature range.

MMD Components, 30400 Esperanza, Rancho Santa Margarita, CA, 92688  
Phone: (949) 709-5075, Fax: (949) 709-3536, [www.mmdcomp.com](http://www.mmdcomp.com)  
Sales@mmdcomp.com