X Series Crystal



- 2mm X 2.5mm 4 Pads Ceramic Package \triangleright
- Ultra-miniature Profile \geq
- **RoHS** Compliant \geq
- Tape and Reel Packaging ≻

ELECTRICAL SPECIFICATIONS:		ESR CHART:		
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)	Erecuency Dongo	ESR (Ohms)	Mode / Cut
Storage Temperature	-40° C to $+85^{\circ}$ C	Frequency Range 16.000MHZ to 19.999MHZ	120 Max	Fund / AT
Aging	$\pm 2ppm/per year$	20.000MHZ to 29.999MHZ		
Shunt Capacitance	3pF Max	30.000MHZ to 29.999MHZ	80 Max 50 Max	Fund / AT Fund / AT
	10pF Standard	30.000MHZ to 80.000MHZ	30 Max	Fulld / A I
Load Capacitance	(See Part Number Guide for Options)			
Equivalent Series Resistance	See ESR Chart			
Drive Level	100µW Max	MARKING:		
Insulation Resistance	500 Megaohms Min at 100VDC			
Shock	MIL-STD-883, Meth 2002, Cond B	Line 1: MXX.XXX XX.XXX = Frequency in MHz		
Solderability	MIL-STD-883, Meth 2003	AA.AAA – Prequency in Milz		
Solvent Resistance	MIL-STD-202, Meth 215	Line 2: SYMCCL		
Vibration	MIL-STD-883, Meth 2007, Cond A	S = Internal Code		
Gross Leak Test	MIL-STD-883, Meth 1014, Cond C	YM = Date Code (Year/Month)		
Fine Leak Test	MIL-STD-883, Meth 1014, Cond A	CC = Crystal Parameters Code		
	L = Denotes RoHS Compliant			
NOTE 1: PIN 2 ANE	2.10 [.083] MAX 0.65 [.026] 2 1 0.65 [.026] 2 0.80 DIMENSIONS IN BRACKETS ARE IN INCHES D PIN 4 ARE INTERNALLY CONNECTED AND SHOULD NO	p [.031]	- 1.20 [.047] MENDED ATTERN	(.012) ON.
PART NUMBER GUIDE: 2mm X 2.5mm Load Capac S = Series 10 = 10pF (Star XX = XXpF (8pF	$\frac{4 \text{ Pads}}{\frac{\text{Temperature}}{Formation Formation $	$B = -20^{\circ}C \text{ to } +70^{\circ}C$ $B = -20^{\circ}C \text{ to } +85^{\circ}C$ $T = Ta$	IE Added Options = No Added Options pe and Reel	;
MMD Components, 30400 Esperanza, Rancho Santa Margarita, CA, 92688 Phone: (949) 709-5075, Fax: (949) 709-3536, <u>www.mmdcomp.com</u>				

Sales@mmdcomp.com