H Series Crystal



- > 6.0mm x 3.5 mm x1.2mm Ceramic Package
- > Tight Tolerance and Stability
- > Wide Frequency Range
- > Tape and Reel Packaging



ESR CHART: ELECTRICAL SPECIFICATIONS: Frequency Range 8.000MHZ to 100.000MHZ Frequency Range ESR (Ohms) Mode / Cut Frequency Tolerance / Stability (See Part Number Guide for Options) 8.000MHZ to 10.999MHZ 100 max Fund / AT (See Part Number Guide for Options) **Operating Temperature Range** 11.000MHZ to 11.999MHZ 80 max Fund / AT -40°C to +85°C Storage Temperature 12.000MHZ to 15.999MHZ 60 max Fund / AT Aging ±5ppm per year max 16.000MHZ to 39.999MHZ 40 max Fund / AT Shunt Capacitance 7pF max 40.000MHZ to100.000MHZ 70 max 3rd OT/ AT 20pF Standard Load Capacitance (See Part Number Guide for Options) MARKING: Equivalent Series Resistance See ESR Chart Mode of Operation Fundamental / 3rd OT 100µW max Drive Level Line 1: MXX.XXX Insulation Resistance 500 M ohms min at 100VDC ±15VDC XX.XXX = Frequency in MHz Shock MIL-STD-883, Meth 2002, Cond B Line 2: SYMCCL MIL-STD-883, Meth 2003 Solderability S = Internal Code Solvent Resistance MIL-STD-202, Meth 215 YM = Date Code (Year/Month) Vibration MIL-STD-883, Meth 2007, Cond A CC = Crystal Parameters Code Gross Leak Test MIL-STD-883, Meth 1014, Cond C L = Denotes RoHS Compliant Fine Leak Test MIL-STD-883, Meth 1014, Cond A **MECHANICALS DETAIL:** 6.20 [.244] 1.20 [.047] 3.00 [.118] 2.40 [.094] MAX MAX PIN CONNECTIONS 1.10 [.043] PIN 1 CRYSTAL 3.70 [.146] MARKING PIN 2 CASE GROUND MAX PIN 3 CRYSTAL PIN 4 CASE GROUND 1.50 [.059] 1.40 [.055] 2.00 [.079] Dimension in Brackets are in Inches Recommended Land Pattern PART NUMBER GUIDE: Frequency н 6mm X 3.5mm x 1.2mm 4 Pads Mode of Operation = Fundamental Temperature 3 = 3rd Overtone Tolerance/Stability* $A = \pm 50 \text{ ppm} / \pm 100 \text{ ppm}$ $B = \pm 30 \text{ ppm} / \pm 50 \text{ ppm}$ $C = \pm 15 \text{ ppm} / \pm 30 \text{ ppm}$ Load Capacitance Operating Temperature $D = \pm 10 \text{ ppm} / \pm 15 \text{ ppm}$ S = Series $A = 0^{\circ}C \text{ to } + 70^{\circ}C$ Value Added Options $E = \pm 50 \text{ ppm} / \pm 50 \text{ ppm}$ Blank = No Added Options 20 = 20 pF (Standard) $B = -20^{\circ}C \text{ to } + 70^{\circ}C$ $N = \pm 10 \text{ ppm} / \pm 10 \text{ ppm}$ C = -40°C to +85°C ** T = Tape and Reel XX = XXpF (8pF to 50pF) * Please consult with MMD sales department for any other parameters or options. ** Not all Frequency Tolerance/Stability options available at this temperature range.

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