ECCM8AA16-20.000M

ECCM8 A A 16 -20.000M

Series
RoHS Compliant (Pb-free) 2.5mm x 4mm Ceramic SMD Crystal

Frequency Tolerance/Stability
±50ppm at 25°C, ±100ppm over 0°C to +70°C

Mode of Operation
AT-Cut Fundamental

Load Capacitance
16pF Parallel Resonant

Nominal Frequency
20.000MHz

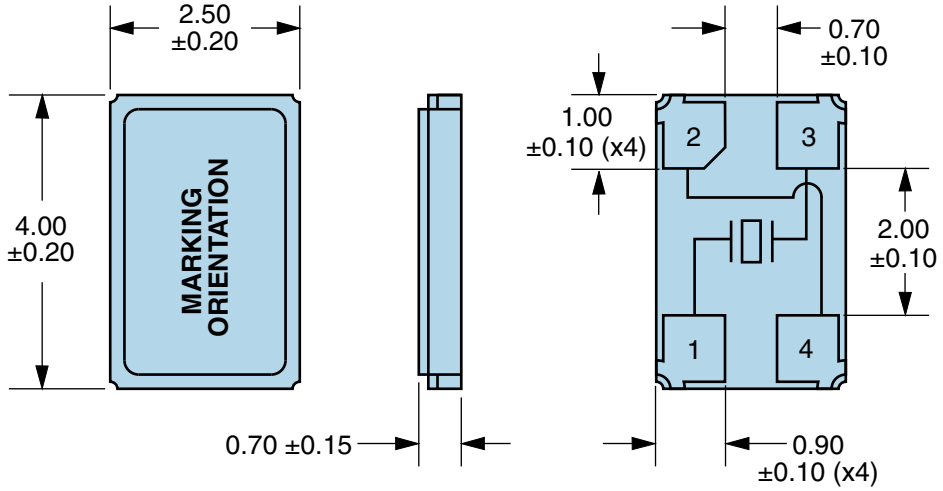
ELECTRICAL SPECIFICATIONS

Nominal Frequency	20.000MHz
Frequency Tolerance/Stability	±50ppm at 25°C, ±100ppm over 0°C to +70°C
Aging at 25°C	±3ppm/Year Maximum
Load Capacitance	16pF Parallel Resonant
Shunt Capacitance (C0)	5pF Maximum
Equivalent Series Resistance	60 Ohms Maximum
Mode of Operation	AT-Cut Fundamental
Drive Level	100µWatts Maximum, 10µWatts Correlation
Crystal Cut	AT-Cut
Spurious Response	>3dB from Fo to Fo+5000ppm
Drive Level Dependancy (DLD2)	20% of Maximum ESR Limit (from 1µWatt to 100µWatt)
Insulation Resistance	500 Megaohms Minimum at 100Vdc

ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

ESD Susceptibility	MIL-STD-883, Method 3015, Class 1, HBM: 1500V
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Flammability	UL94-V0
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003
Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A

MECHANICAL DIMENSIONS (all dimensions in millimeters)



PIN	CONNECTION
1	Crystal
2	Cover/Ground
3	Crystal
4	Cover/Ground

LINE	MARKING
1	**E20.0** *E=Ecliptek*
2	**XXXXX** *XXXXX=Ecliptek Manufacturing Identifier*