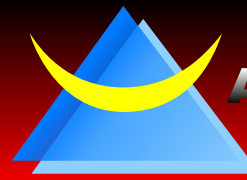


C1 SERIES

- HC-49/U Thru-Hole Crystal
- AT Cut
- Wide Frequency Range
- RoHS Compliant



ASCEND

FREQUENCY DEVICES

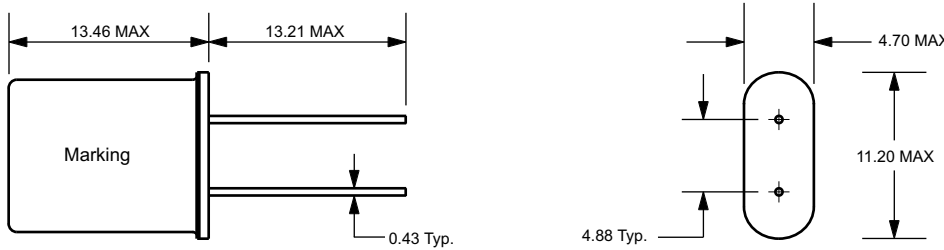
Electrical Specifications

Frequency Range:	1.8432MHz to 200.000MHz
Frequency Tolerance/Stability:	Select from options below
Operating Temperature Range:	Select from options below
Storage Temperature Range:	-55°C to +125°C
Aging:	±5ppm / first year Maximum
Shunt Capacitance:	7pF Maximum
Load Capacitance:	Select from options below
Equivalent Series Resistance:	See ESR Table Below
Mode of Operation:	Fundamental, 3rd Overtone or 5th Overtone
Drive Level:	2mWatts Maximum
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

Equivalent Series Resistance Table

Frequency Range	ESR (Ohms)	Mode / Cut	Frequency Range	ESR (Ohms)	Mode / Cut
1.8432MHz to 1.999MHz	650 Maximum	Fundamental / AT	3.600MHz to 3.999MHz	120 Maximum	Fundamental / AT
2.000MHz to 2.399MHz	550 Maximum	Fundamental / AT	4.000MHz to 4.999MHz	100 Maximum	Fundamental / AT
2.400MHz to 2.999MHz	350 Maximum	Fundamental / AT	5.000MHz to 5.999MHz	70 Maximum	Fundamental / AT
3.000MHz to 3.199MHz	250 Maximum	Fundamental / AT	6.000MHz to 40.000MHz	40 Maximum	Fundamental / AT
3.200MHz to 3.499MHz	200 Maximum	Fundamental / AT	24.000MHz to 75.000MHz	40 Maximum	Third Overtone / AT
3.500MHz to 3.599MHz	150 Maximum	Fundamental / AT	75.001MHz to 200.000MHz	100 Maximum	Fifth Overtone / AT

Mechanical Dimensions



MARKING

Line 1: Ascend
 Line 2: XX.XXXR
 ("R" Denotes RoHS Compliance)
 Line 3: XXXXXX (Date Code)

ALL DIMENSIONS
 IN MILLIMETERS

Part Numbering Guide

C1 A A 1 20 1 - 33.000M - TR

Series

C1 = HC49/U

Frequency Tolerance

A = ±5ppm E = ±25ppm
 B = ±10ppm F = ±30ppm
 C = ±15ppm G = ±50ppm
 D = ±20ppm H = ±100ppm

Frequency Stability

A = ±5ppm E = ±25ppm
 B = ±10ppm F = ±30ppm
 C = ±15ppm G = ±50ppm
 D = ±20ppm H = ±100ppm

Temperature Range

1 = -10°C to +60°C
 2 = -20°C to +70°C
 3 = -40°C to +85°C

Packaging

Blank = Bulk
 XX(X) = Value-Add Option

Frequency

Mode of Operation

1 = AT Fundamental
 3 = 3rd Overtone
 5 = 5th Overtone

Load Capacitance

SR = Series 16 = 16pF
 08 = 8pF 18 = 18pF
 09 = 9pF 20 = 20pF
 10 = 10pF 32 = 32pF
 12 = 12pF XX = Other

Not all temperature/stability options are available. Please consult with factory for current capabilities

