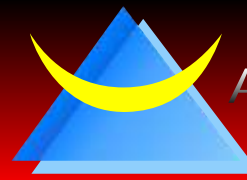


CSMC1 SERIES

- SMD Ceramic 5mm x 7mm (4Pad)
- Wide Frequency Range
- Tight Tolerance and Stability
- RoHS Compliant



ASCEND

FREQUENCY DEVICES

Electrical Specifications

Frequency Range:	7.680MHz to 70.000MHz
Frequency Tolerance/Stability:	Select from options below
Operating Temperature Range:	Select from options below
Storage Temperature Range:	-40°C to +85°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, or 3rd Overtone
Drive Level:	50µWatts Maximum
Insulation Resistance:	500 Megaohms Minimum at 100Vdc
Hermeticity of Seal :	1 x 10 ⁻² mPa (m³/s) Maximum
Shock:	MIL-STD-883, Method 2002, Condition B
Solderability:	MIL-STD-883, Method 2003
Solvent Resistance:	MIL-STD-202, Method 215
Vibration:	MIL-STD-883, Method 2007, Condition A
Gross Leak:	MIL-STD-883, Method 1014, Condition C
Fine Leak:	MIL-STD-883, Method 1014, Condition A

Equivalent Series Resistance Table

Frequency Range	ESR (Ohms)	Mode / Cut	Frequency Range	ESR (Ohms)	Mode / Cut	Frequency Range	ESR (Ohms)	Mode / Cut
7.680MHz to 9.999MHz	90 Maximum	Fundamental / AT	11.000MHz to 15.999MHz	45 Maximum	Fundamental / AT	36.000MHz to 39.999MHz	100 Maximum	3rd Overtone / AT
10.000MHz to 10.999MHz	60 Maximum	Fundamental / AT	16.000MHz to 35.999MHz	30 Maximum	Fundamental / AT	40.000MHz to 70.000MHz	80 Maximum	3rd Overtone / AT

Mechanical Dimensions

MARKING
 Line 1: Ascend
 Line 2: XX.XXX (Frequency)
 Line 3: XXXXXX (Date Code)

Pin Connection

1	Crystal	3	Crystal
2	Case Ground	4	Case Ground

CSMC - Optional 2 Pad Version

ALL DIMENSIONS IN MILLIMETERS

Part Numbering Guide

CSMC1 A A 1 20 1 - 33.000M - TR

Series

CSMC = (5x7mm 2 Pad)
 CSMC1 = (5x7mm 4 Pad)

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

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

Packaging

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

Frequency

Mode of Operation

1 = AT Fundamental
 3 = 3rd Overtone

Load Capacitance

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

