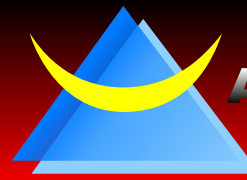


CSMC2 SERIES

- SMD Ceramic 3.2mm x 5mm (4Pad)
- Wide Frequency Range
- Tight Tolerance and Stability
- RoHS Compliant



ASCEND

FREQUENCY DEVICES

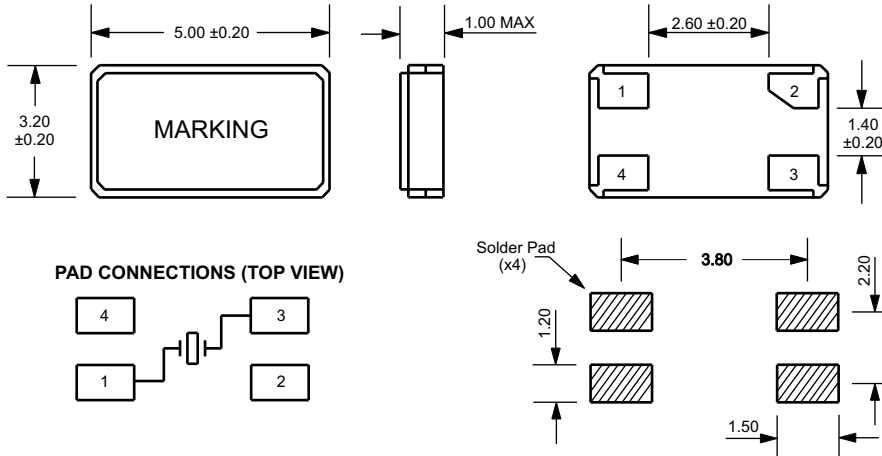
Electrical Specifications

Frequency Range:	10.000MHz to 53.125MHz
Frequency Tolerance/Stability:	Select from options below
Operating Temperature Range:	Select from options below
Storage Temperature Range:	-40°C to +85°C
Aging:	±3ppm Maximum per year (±1ppm typical)
Shunt Capacitance:	7pF Maximum
Load Capacitance:	Select from options below
Equivalent Series Resistance:	See ESR Table Below
Mode of Operation:	Fundamental
Drive Level:	100µWatts Typical
Insulation Resistance:	500 Megaohms Minimum at 50Vdc
Hermeticity of Seal: :	1 x 10 ⁻² mPa (m³/s) Maximum
Shock Resistance:	±5ppm Maximum (drop test onto a hard wooden board from 75cm)

Equivalent Series Resistance Table

Frequency Range	ESR (Ohms)	Mode / Cut	Frequency Range	ESR (Ohms)	Mode / Cut
10.000MHz to 14.999MHz	70 Maximum	Fundamental / AT	20.000MHz to 34.999MHz	50 Maximum	Fundamental / AT
15.000MHz to 19.999MHz	60 Maximum	Fundamental / AT	35.000MHz to 53.125MHz	45 Maximum	Fundamental / AT

Mechanical Dimensions



Part Numbering Guide

CSMC2 A A 1 20 1 - 33.000M - TR

Series

Ceramic SMD Crystal (3.2mm x 5.0mm, 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
 TR = Tape and Reel

Frequency

Mode of Operation

1 = AT Fundamental

Load Capacitance

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

