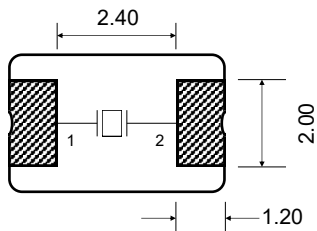
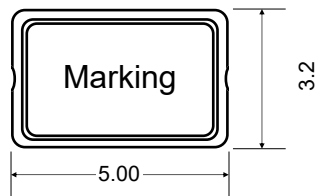


MINIATURE CERAMIC SMD CRYSTAL (5.0 x 3.2 x 1.2mm)
FEATURES:

- HIGH FREQUENCY RANGE
- LOW COST SMD PACKAGE
- LOW PROFILE / SUITABLE FOR REFLOW


■ SPECIFICATION

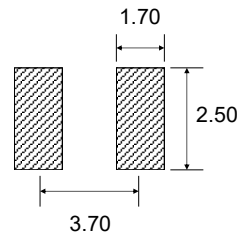
FREQUENCY RANGE	7.3728MHz ~ 156.25MHz
FREQUENCY TOLERANCE @ 25°C	±10ppm ~ ±50ppm (See P/N guide for other options)
FREQUENCY STABILITY	±10ppm ~ ±50ppm (See P/N guide for other options)
OPERATING TEMPERATURE RANGE	STD: 0°C ~ 70°C, Option: -40°C ~ 85°C (See P/N guide for other options)
STORAGE TEMPERATURE RANGE	-55°C ~ 125°C
LOAD CAPACITANCE	STD: 18pF (See P/N guide for other options)
SHUNT CAPACITANCE	5.0pF max.
INSULATION RESISTANCE	500MΩ min. @ 100V _{DC} ± 15V _{DC}
DRIVE LEVEL	300μW max.
AGING @ 25°C ± 3°C	±3.0ppm / 1 st year max.
EQUIVALENT SERIES RESISTANCE	Fundamental: 7.000MHz ~ 11.999MHz: 100Ω max. 12.000MHz ~ 14.000MHz: 60Ω max. Fundamental: 14.001MHz ~ 20.000MHz: 50Ω max. 20.000MHz ~ 54.000MHz: 40Ω max. 3rd overtone: 40.000MHz ~ 60.000MHz: 70Ω max. 5th overtone: 60.001MHz ~ 156.25MHz: 60Ω max.
OPERATION MODE	Fundamental, 3 rd Overtone, 5 th Overtone

■ PACKAGE DIMENSIONS


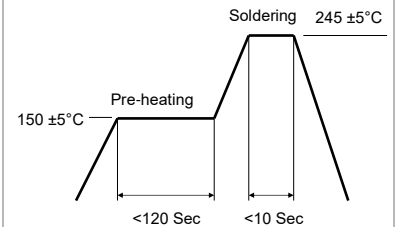
Unit : mm

Pin Configuration

1	Xtal
2	Xtal

■ SOLDER PATTERN


Unit : mm

■ REFLOW PROFILE


Note: Consult factory for detail

■ PART NUMBERING GUIDE
CS53B – F 00 00 HM 08 – 40.000M – TR

Mode F: Fundamental T: 3 rd overtone B: 5 th overtone	Stability 00: ± 100ppm 50: ± 50ppm 25: ± 25ppm 15: ± 15ppm 10: ± 10ppm XX: Two digit for Stability	Load Capacitance 08: 8pF 20: 20pF 10: 10pF 22: 22pF 12: 12pF 24: 24pF 16: 16pF 28: 28pF 18: 18pF 32: 32pF S: Series	Other Options TR: Tape and reel
Tolerance @ 25°C 00: ± 100ppm 50: ± 50ppm(standard) 30: ± 30ppm 25: ± 25ppm 10: ± 10ppm XX: Two digit for Tolerance	Operating Temperature A: -55 F: -20 M: 70 S: 100 B: -50 G: -10 N: 75 T: 105 C: -40 H: 0 P: 80 U: 125 D: -35 J: 50 Q: 85 X: custom E: -30 K: 60 R: 90	Frequency M: MHz	