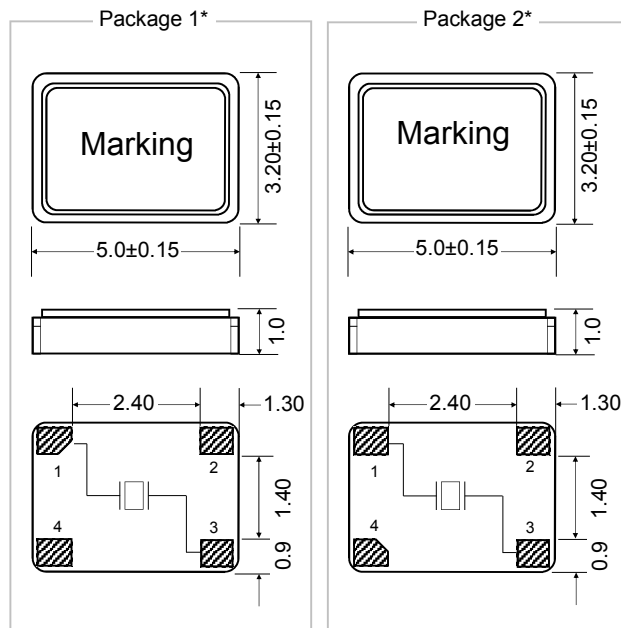


**MINIATURE CERAMIC SMD CRYSTAL (5.0 x 3.2 x 1.0mm)**
**FEATURES:**

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


**■ SPECIFICATION**

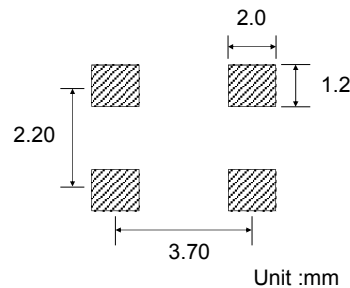
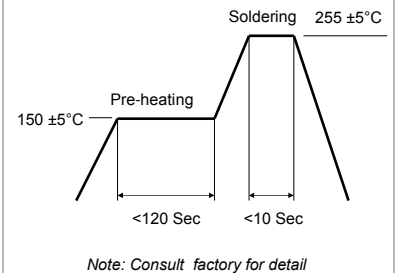
<b>FREQUENCY RANGE</b>	7.3728MHz ~ 270.000MHz
<b>FREQUENCY TOLERANCE @ 25°C</b>	±30ppm (See P/N guide for other options)
<b>FREQUENCY STABILITY</b>	±50ppm (See P/N guide for other options)
<b>OPERATING TEMPERATURE</b>	STD: 0°C ~ 70°C, Option: -40°C ~ 85°C (See P/N guide for other options)
<b>STORAGE TEMPERATURE RANGE</b>	-55°C ~ 105°C
<b>LOAD CAPACITANCE</b>	STD: 18pF (See P/N guide for other options)
<b>SHUNT CAPACITANCE</b>	5.0pF max.
<b>INSULATION RESISTANCE</b>	500MΩ min. @ 100V <sub>DC</sub> ± 15V <sub>DC</sub>
<b>DRIVE LEVEL</b>	500μW max.
<b>AGING @ 25°C ± 3°C</b>	±3.0ppm / 1 <sup>st</sup> year max.
<b>EQUIVALENT SERIES RESISTANCE</b>	<b>Fundamental:</b> 7.000MHz ~ 10.000MHz: 100Ω max.    10.001MHz ~ 12.000MHz: 60Ω max. <b>Fundamental:</b> 12.001MHz ~ 19.000MHz: 50Ω max.    19.001MHz ~ 40.000MHz: 40Ω max. <b>3<sup>rd</sup> overtone:</b> 40.001MHz ~ 60.000MHz: 70Ω max.    60.001MHz ~ 170.000MHz: 100Ω max. <b>5<sup>th</sup> overtone:</b> 170.001MHz ~ 270.000MHz: 160Ω max.
<b>OPERATION MODE</b>	Fundamental, 3 <sup>rd</sup> overtone, 5 <sup>th</sup> overtone

**■ PACKAGE DIMENSIONS**


\* Package 1 and 2 are provided interchangeably based on material availability.  
 \*\* Different chamfer location between package 1 and 2.

Unit : mm

Pin Configuration	
1	Xtal
2	GND
3	Xtal
4	GND

**■ SOLDER PATTERN**

**■ REFLOW PROFILE**

**■ PART NUMBERING GUIDE**

CS53A	F	30	50	HM	18	40.000M	TR
<b>Mode</b>		<b>Stability</b>		<b>Load Capacitance</b>		<b>Other Options</b>	
F: Fundamental T: 3 <sup>rd</sup> overtone B: 5 <sup>th</sup> overtone		00: ± 100ppm 50: ± 50ppm 25: ± 25ppm 15: ± 15ppm 10: ± 10ppm XX: Two digit for Stability		08: 8pF    20: 20pF 10: 10pF    22: 22pF 12: 12pF    24: 24pF 16: 16pF    28: 28pF 18: 18pF    32: 32pF S: Series		TR: Tape and reel	
<b>Tolerance @ 25°C</b>		<b>Operating Temperature</b>					
00: ± 100ppm 50: ± 50ppm 30: ± 30ppm 25: ± 25ppm 10: ± 10ppm XX: Two digit for Tolerance		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		<b>Frequency</b>			
		M: MHz					

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