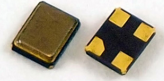


ULTRA-MINIATURE CERAMIC SMD CRYSTAL (3.2 x 2.5 x 0.65mm)

FEATURES:

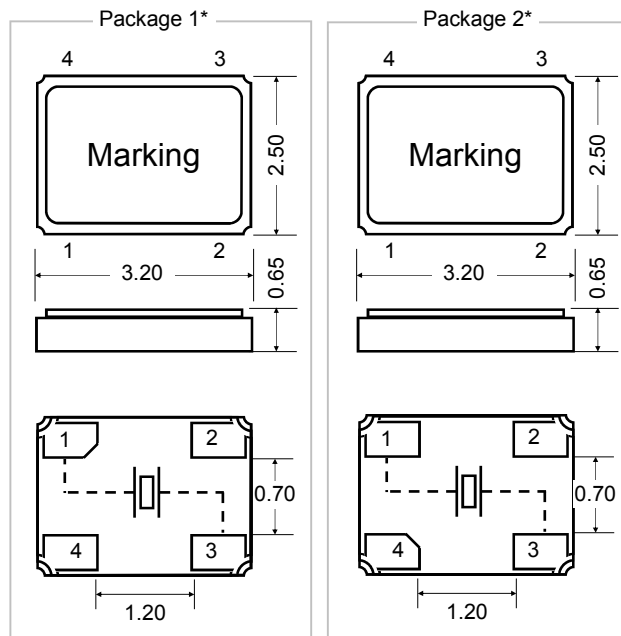
- WIDE FREQUENCY RANGE UP TO 300MHZ
- LOW COST CERAMIC PACKAGE
- LOW PROFILE / SUITABLE FOR REFLOW



■ SPECIFICATION

FREQUENCY RANGE	20.000MHz ~ 300.000MHz
FREQUENCY TOLERANCE @ 25°C	STD: ±30ppm (See P/N guide for other options)
FREQUENCY STABILITY	STD: ±50ppm (See P/N guide for other options)
OPERATING TEMPERATURE RANGE	STD: 0°C ~ 70°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: 20.000MHz ~ 70.000MHz: 40Ω max. 3rd Overtone: 60.000MHz ~ 115.000MHz: 100Ω max. 3rd Overtone: 116.000MHz ~ 170.000MHz: 80Ω max. 5th Overtone: 170.000MHz ~ 300.000MHz: 120Ω max.
OPERATION MODE	Fundamental, 3 rd Overtone, 5 th Overtone

■ PACKAGE DIMENSIONS

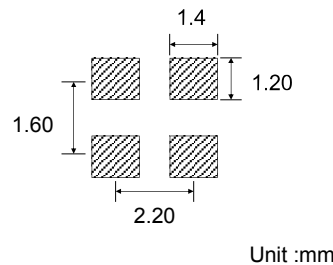


* Package 1 and 2 are provided interchangeably based on material availability.
 ** Different chamfer location between package 1 and 2.

Pin Configuration	
1	Xtal
2	GND
3	Xtal
4	GND

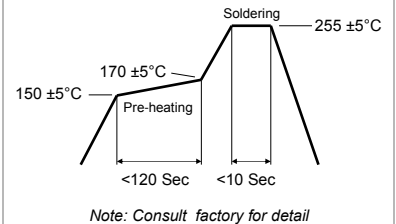
Unit : mm

■ SOLDER PATTERN



Unit :mm

■ REFLOW PROFILE



Note: Consult factory for detail

■ PART NUMBERING GUIDE

CS32H - F		00	00	HM	08 - 40.000M - TR	
Mode F: Fundamental T: 3 rd overtone X: 5 th overtone		Stability 00: ± 100ppm 50: ± 50ppm 30: ± 30ppm 20: ± 20ppm 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 50: ± 50ppm 30: ± 30ppm 15: ± 15ppm 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		

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