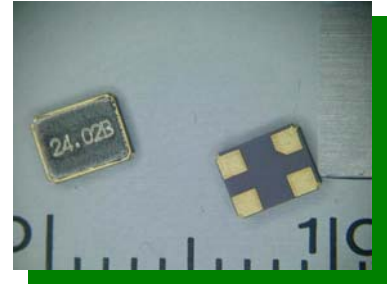


Microprocessor Crystal Unit 3.2 x 2.5mm Surface Mount Package



Features

- Seam Seal
- Excellent Solderability
- High Frequency Stability
- Excellent Thermal Hysteresis
- Excellent Vibration Resistance & Shock Resistance
- RoHS Compliant



Electrical Specifications

Frequency Range		12.000 to 52.000	MHz
Mode of Oscillation	Fundamental	12.000 to 52.000	
Frequency Tolerance at 25°C	Standard	±30	PPM Max
	Optional	± 25 to ±10	
Frequency Stability over Temperature Range	Standard	±50	
	Optional	±30 to ±10	
Operating Temperature Range	Standard	-10 to +70	°C
	Extended	-40 to +85	
Storage Temperature Range		-55 to +125	
Aging		±3	PPM Max/Year
Load Capacitance		7 to 32 or Series Resonance	pF
Shunt Capacitance		5.0	pF
Equivalent Ser Resistance (ESR)		See ESR Table	Ohms
Drive Level		100	uW Typ
Insulation Resistance		500 at 100Vdc (±15Vdc)	M Ohm

Frequency Range vs. ESR Values

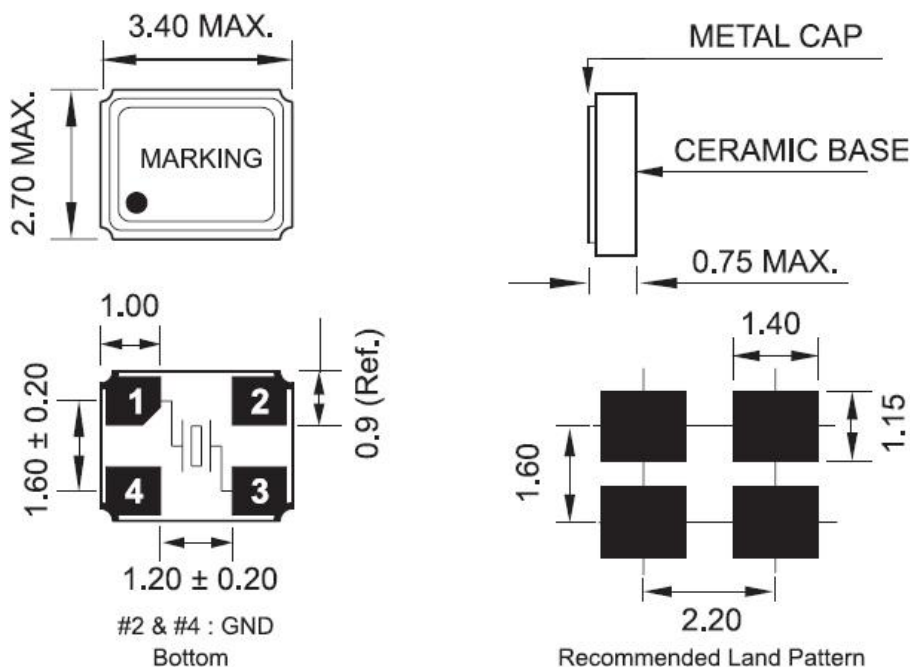
Frequency Range in MHz	ESR Ohms Max	Mode of Operation
12.000 to 29.999	100	Fundamental
30.000 to 52.000	50	Fundamental

Part Numbering System

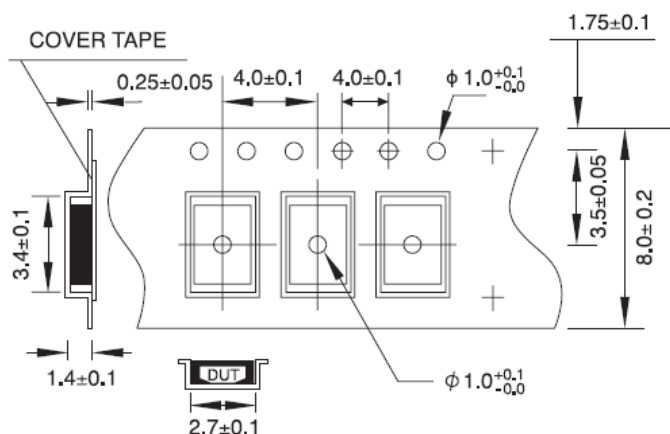
Type	Frequency	Load Capacitance	Tolerance/ Stability(*1)	Extended Temperature(*1)	Tape & Reel
WSC32	in MHz	7 to 32 for Parallel or S for Series	(PPM/PPM) e.g. 1020, 1010	EXT	TR

Examples : WSC32-32.000-18-TR or WSC32-52.000-S-1010-EXT-TR

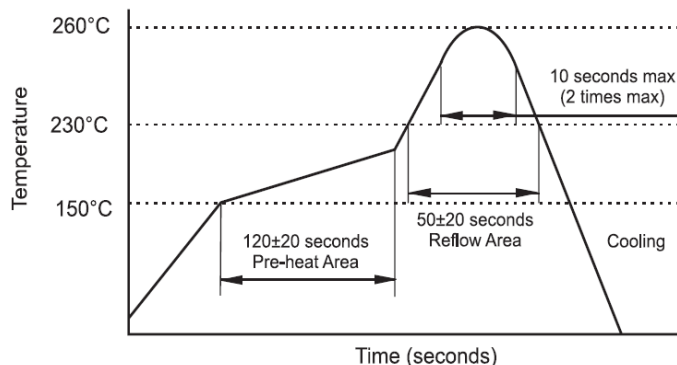
Mechanical Outline



Carrier Tape Dimensions



Solder Reflow Characteristics



Notes:

- 1 - Standard Tolerance/Stability and Standard Temperature Range, do not need to be included in Part Number description.
- 2 - Product is shipped in Tape and Reel configuration. Each reel contains 1000 pieces.
- 3 - Specification subject to change without notice.