

Microprocessor Crystal Unit 6.0 x 3.5mm 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		10.000 to 100.000	MHz
Mode of Oscillation	Fundamental	10.000 to 40.000	
	Third Overtone	40.100 to 100.000	
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 +60	°C
	Extended	-40 to +85	
Storage Temperature Range		-55 to +125	
Aging		±5	PPM Max/Year
Load Capacitance		10 to 32 or Series Resonance	pF
Shunt Capacitance		7.0	pF
Equivalent Ser Resistance (ESR)		See ESR Table	Ohms
Drive Level		500	uW Max
Insulation Resistance		500 at 100Vdc (±15Vdc)	M Ohm

Frequency Range vs. ESR Values

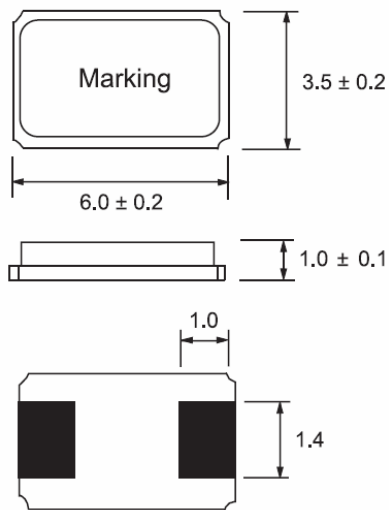
Frequency Range in MHz	ESR Ohms Max
10.000 to 12.000	80 (Fundamental)
12.100 to 16.000	60 (Fundamental)
16.100 to 40.000	40 (Fundamental)
40.100 to 100.000	70 (Third Overtone)

Part Numbering System

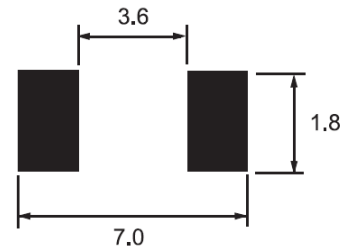
Type	Frequency	Load Capacitance	Mode (*1)	Tolerance/ Stability (*1)	Extended Temperature (*1)	Tape & Reel
WSC60B	in MHz	10 to 32 for Parallel or S for Series	3OT – Third Overtone	(PPM/PPM) e.g. 1020, 1010	EXT	TR

Examples : WSC60B-12.000-18-TR, WSC60B-48.000-18-3OT-TR or WSC60B-52.000-S-1010-EXT-TR

Mechanical Outline



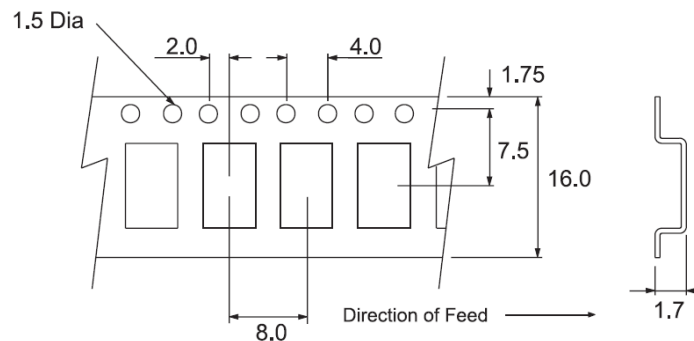
PCB Solder Pad Layout



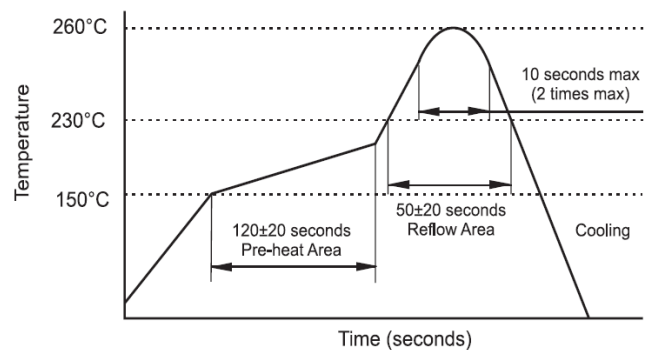
Pad Connection



Carrier Tape Dimensions



Solder Reflow Characteristics



Notes:

- 1 - Fundamental Mode, 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.