

RoHS Compliant
Pb - Lead Free

Ltr	Revisions	Date	Appr

Electrical Specifications:

Frequency Range		1.000 to 75.000			MHz	
Temperature Stability		±100			PPM Max	
		±50				
		±30				
		±20				
Aging per Year		±5				
Operating Temperature Range		Standard	-10 to +70		°C	
		Extended	-40 to +85			
Storage Temperature Range		-55 to +125				
Supply Voltage		1.8 ± 5%	2.5 ± 5%	3.3 ± 5%	Vdd	
Input Current		1.000 to 32.000 MHz	7	20	20	mA Max
		32.100 to 50.000 MHz	15	20	25	
		50.100 to 60.000 MHz	15	20	25	
		60.100 to 75.000 MHz	15	20	25	
Output Voltage		Logic High (Voh)	90% (80% at 1.8)		Vdd Min	
		Logic Low (Vol)	10% (20% at 1.8)		Vdd Max	
Output Symmetry		Standard	40 to 60		%	
		Tight	45 to 55			
Output Current		Lol/Loh			±2	mA Min
Output Load		15			pF Max	
Rise and Fall Time		1.000 to 32.000 MHz	5	6	6	ns Max
		32.100 to 50.000 MHz	3.5	6	6	
		50.100 to 60.000 MHz	3.5	10	10	
		60.100 to 75.000 MHz	3.5	10	10	
Standby Current		10			uA Max	
Enable-Disable Function		Tri-State			-	
Output Disable Time		300	150		ns Max	
Output Enable Time		10	5		ms Max	
Start Up Time		5 (10 at 1.8 Vdd)			ms Max	

Temperature stability is Inclusive of all conditions:
Calibration Tolerance at +25°C, frequency stability over the operating temperature range, supply voltage, supply voltage change, output load changes, shock, vibration, and 1st year aging at +25°C.



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All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: JL

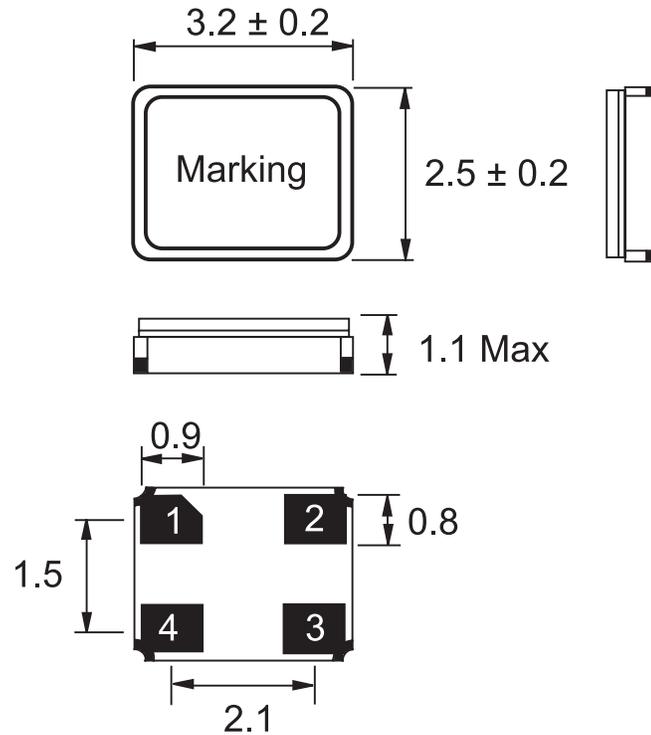
Page: 1/4 Date: April 30, 2006

Specification Title:

**Clock Oscillator
Low Profile
2.5 x 3.2 millimeter Surface Mount
General Product Specification**

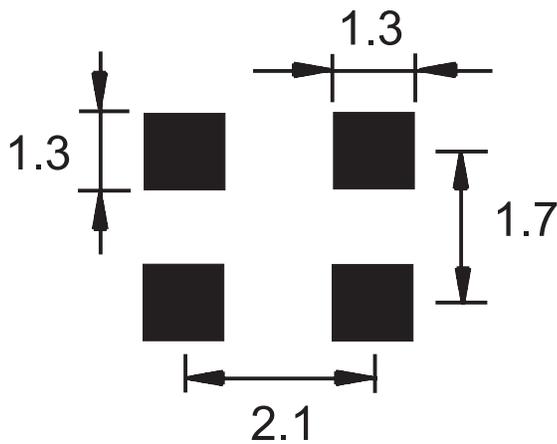
Part Number: **S3 Series**

Mechanical Outline:

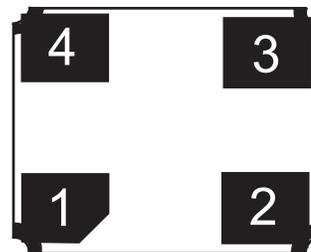


Package is Seam Sealed Ceramic-Metal.
Dimensions are millimeters.

PCB Solder Pad Layout:



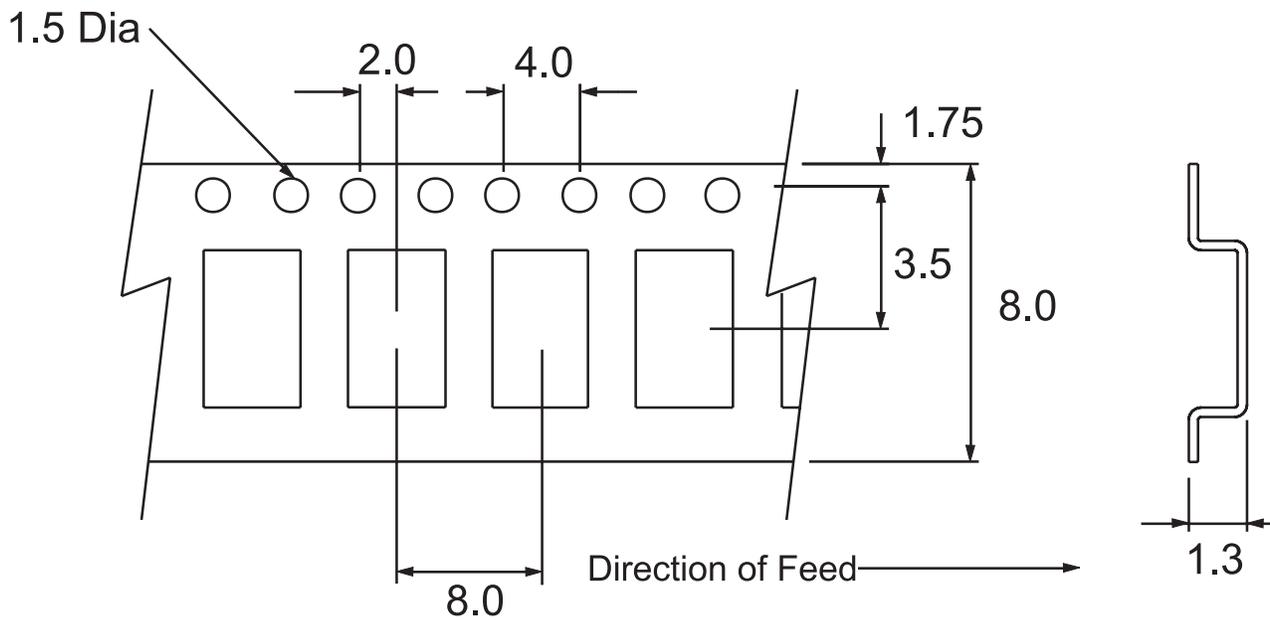
Pad Connection:



- 1: E/D
- 2: Gnd
- 3: Output
- 4: Vin

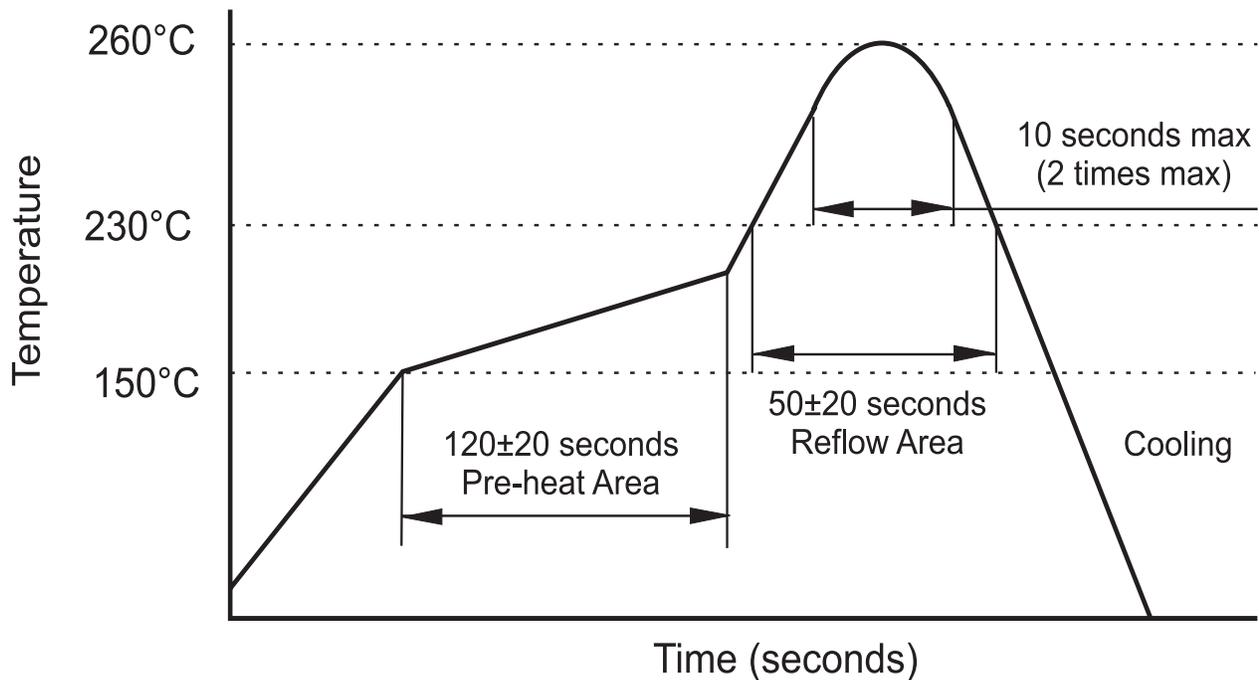
Top View

Carrier Tape Dimensions:



Dimensions are millimeters.

Solder Reflow Characteristics:



How to build a Part Number:

Series	S	Parameter
Package	3	2.5 x 3.2 mm
Supply Voltage	33	+3.3 Vdd ± 5%
	25	+2.5 Vdd ± 5%
	18	+1.8 Vdd ± 5%
Temperature Stability	10	±100 PPM
	05	±50 PPM
	03	±30 PPM
	02	±20 PPM
Duty Cycle	See Notes	±10%
	T	±5%
Frequency	1.000 to 75.000	MHz
Temperature Range	See Notes	-10 to +70 °C
	X	-40 to +85 °C
Packaging	R	Tape and Reel

Part Number Example:

S31805T-50.000-X-R

S3: 2.5 x 3.2 mm SMD Package

18: +1.8 Vdd Supply Voltage

05: ±50 PPM Temperature Stability

T: Tight Symmetry

50.000 MHz Nominal Frequency

X: -40 to + 85° C Extended Temperature Range

R: Tape and Reel Packaging

Notes:

- 1- Standard Duty Cycle and 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- Quantities less than 1000 are shipped bulk in ESD pouches.
- 4- Specification subject to change without notice.