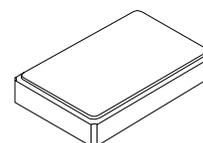




Preliminary

XTL1027

26.43875 MHz Crystal Unit



SM5032-4 Case

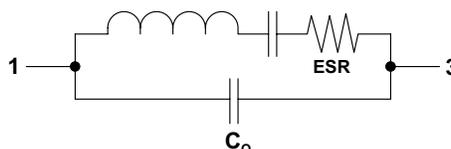
- **Surface Mount Seam-Weld Package**
- **Good Frequency Stability over Temperature**
- **Excellent Reliability**
- **Complies with Directive 2002/95/EC (RoHS)**

The XTL1027 is a surface mount 5.0 x 3.2 mm crystal unit for use in wireless telecommunications devices, especially where an ultra-miniature package is needed for mobility.

Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Nominal Frequency				26.43875		MHz
Mode of Oscillation				Fundamental		
Storage Temperature Range, Crystal Only			-50		+125	°C
Storage Temperature Range, in Tape and Reel			-40		+85	°C
Operating Temperature Range			-20		+80	°C
Frequency Stability over Operating Temperature Range			±20 ppm (referenced to the value at 25°C)			
Frequency Make Tolerance	F _L		±20 ppm @ 25°C ±3°C			
Equivalent Series Resistance	ESR				40	Ω
Shunt Capacitance	C _O				2.0	pF
Nominal Drive Level				10	100	μW
Load Capacitance	C _L			12.0		pF
Insulation Resistance at 100 VDC			500			MΩ
Weight			0.037 ±0.005			gm
Standard Shipping Quantity on 330 mm (13") Reel				3000		units
Lid Symbolization (in addition to Lot and/or Date Codes)			1027 YWWS			

Crystal Equivalent Circuit



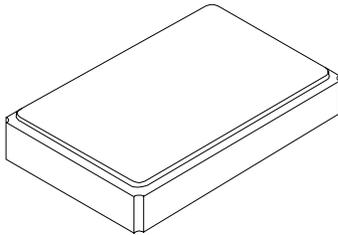
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

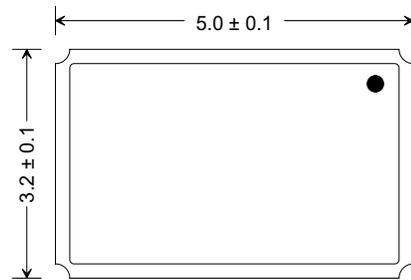
1. US and international patents may apply.
2. The design, manufacturing process, and specifications of this device are subject to change without notice.
3. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

SM5032-4 Case

4-Terminal Surface-Mount Seam Weld Case 5.0 x 3.2 mm Nominal Footprint

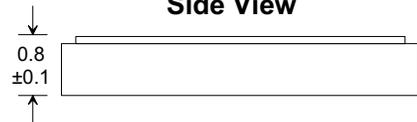


Top View

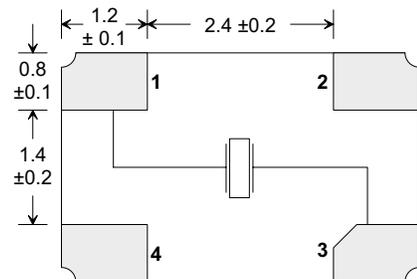


Dot indicates Pin 3 location

Side View



Bottom View

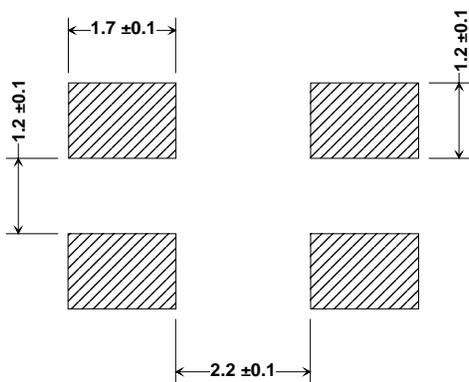


Pins 2 and 4 are connected to the lid

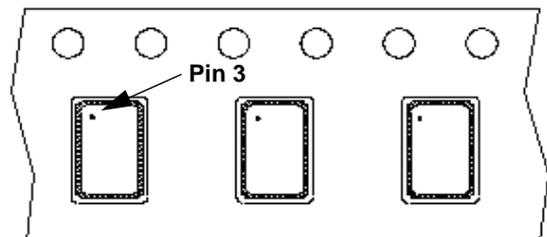
Dimensions are in mm

Electrical Connections

Pin	Connection
1	I/O
2	GND (lid)
3	I/O
4	GND (lid)

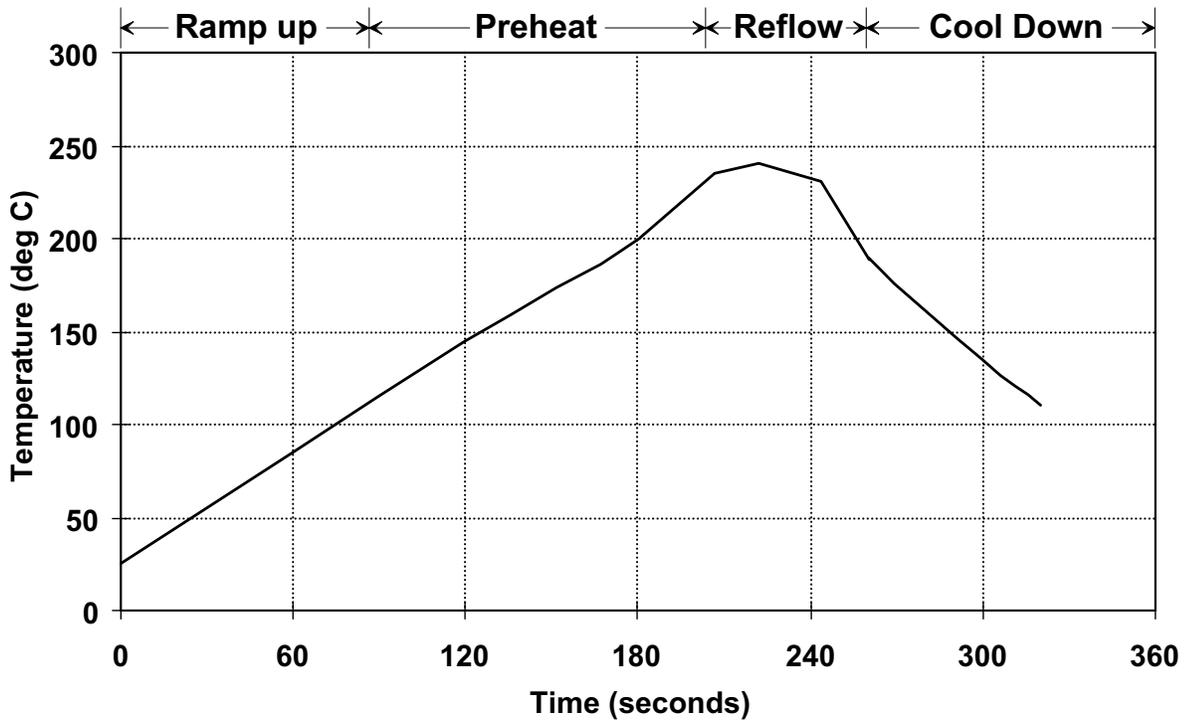


Footprint (mm)



Package Orientation in Carrier Tape

Typical Reflow Profile



Notes:

1. Maximum peak temperature: 265 degrees C for 8 to 12 seconds
2. Typical reflow temperature: 217 ± 5 degrees C for 90 to 100 seconds