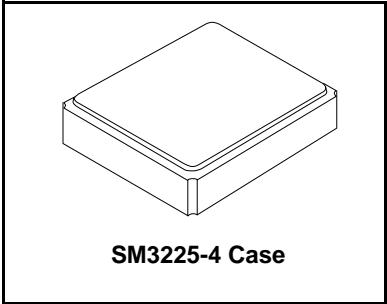


# XTL1008

## 26.0000 MHz Crystal Unit



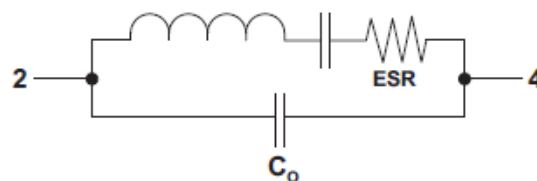
- **High Reliability Quartz Crystal**
- **Excellent Frequency Stability over Temperature**
- **Miniature 3.2 x 2.5 mm SMD Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

The XTL1008 is a 26.0000 MHz surface mount 3.2 x 2.5 mm crystal unit for use in wireless telecommunications devices, especially where a miniature package is needed for mobility.

### Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Nominal Frequency	$f_o$			26.0000		MHz
Mode of Oscillation			Fundamental			
Storage Temperature Range in Tape and Reel			-40		+85	°C
Operating Temperature Range			-40		+85	°C
Frequency Make Tolerance	$f_L$		$\pm 10$ ppm @ 25 °C $\pm 3$ °C			
Frequency Stability, -20 to +70 °C			$\pm 10$ ppm (referred to value at 25 °C)			
Frequency Stability, -40 to +85 °C			$\pm 30$ ppm (referred to value at 25 °C)			
Equivalent Series Resistance	ESR				50	$\Omega$
Nominal Drive Level				10		$\mu W$
Shunt Capacitance	$C_o$				2.0	pF
Load Capacitance	$C_L$			16		pF
Insulation Resistance, 100 VDC			500			$M\Omega$
Standard Shipping Quantity on 178 mm (7") Reel				3000		units
Lid Symbolization (Y = year, WW = week, S = shift)			1008, <u>YWWS</u>			

**Crystal Equivalent Circuit**



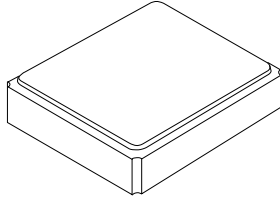
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**NOTES:**

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

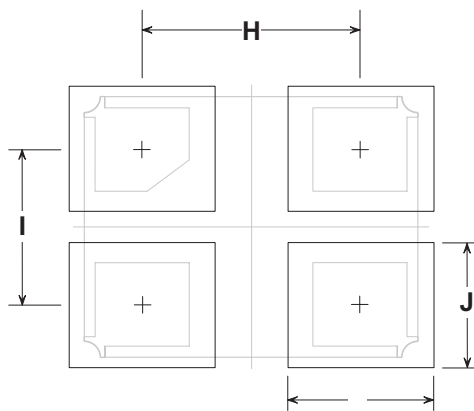
# SM3225-4 Case

## 4 Terminal Surface Mount Seam Weld Case 3.2 x 2.5 mm Nominal Footprint



### Electrical Connections

Connection	Terminals
Ground	1
Input / Output	2
Ground	3
Input / Output	4

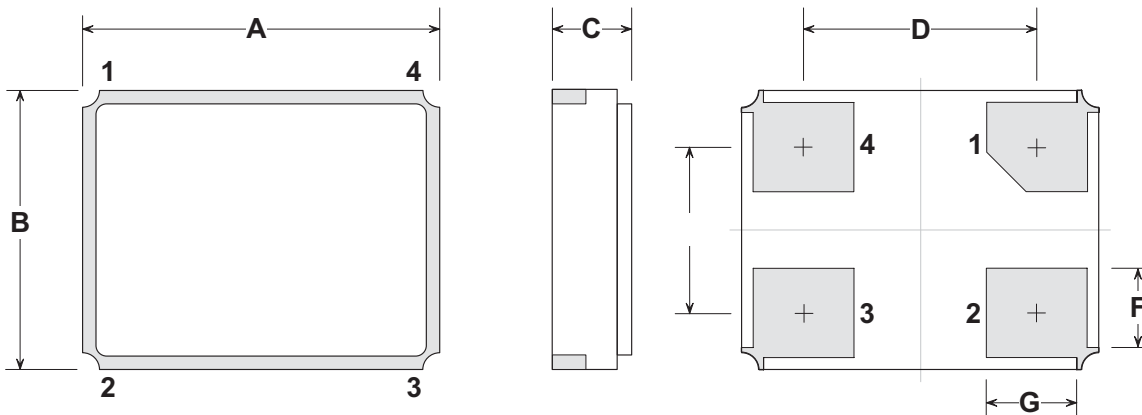


Typical PCB Land Footprint  
(Top View)

### Case and PCB Land Dimensions

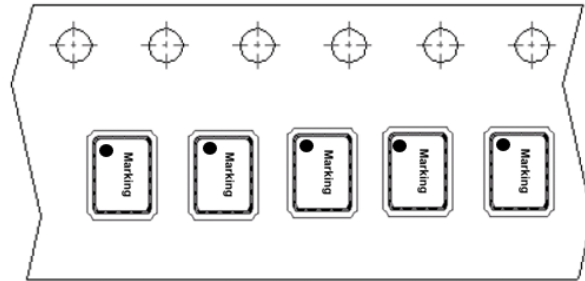
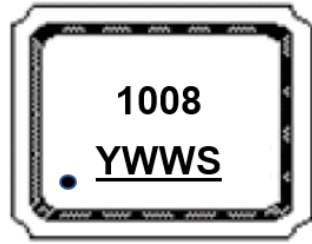
Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.10	3.20	3.30	0.122	0.126	0.130
B	2.40	2.50	2.60	0.094	0.098	0.102
C			0.70			0.028
D		2.10			0.083	
E		1.50			0.059	
F		0.80			0.031	
G		0.90			0.035	
H		2.10			0.083	
I		1.50			0.059	
J		1.20			0.047	
K		1.40			0.055	

### Case Outline Drawing



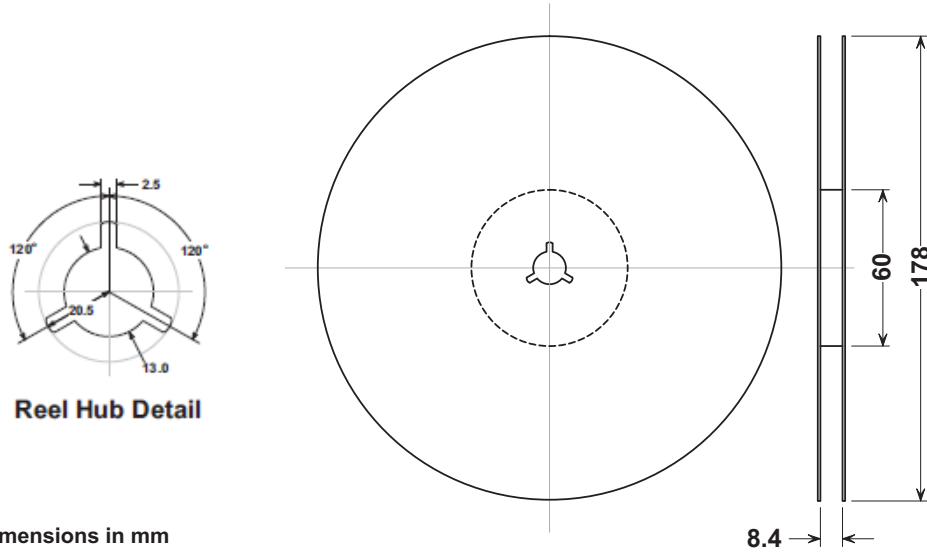
## Marking:

Y = Year  
WW = Week  
S = Shift

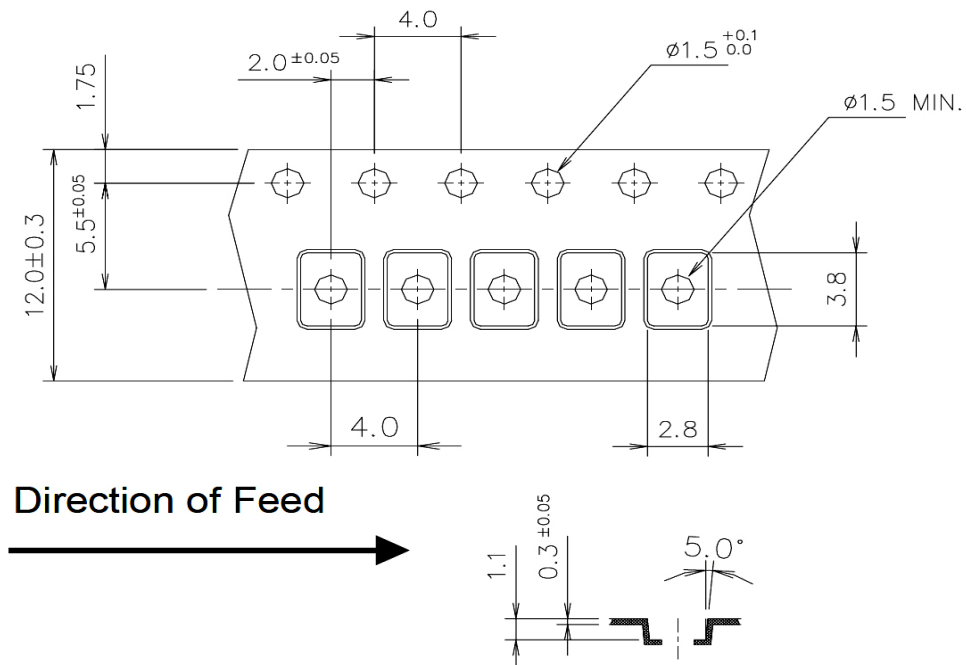


## Reel Dimensions

Tape and Reel Standard per ANSI/EIA-481



## Tape Dimensions



## Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).
4. Time: 5 times maximum.

