



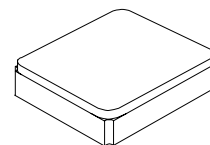
- Surface Mount Seam Weld Package
- Excellent Frequency Stability over Temperature
- Ultra-Miniature Seam Welded Package
- Complies with Directive 2002/95/EC (RoHS)



The XTL1019 is a surface mount 2.0 x 1.6 mm crystal unit for use in wireless telecommunications devices, especially where an ultra-miniature package is needed for mobility.

XTL1019

**48.53000 MHz
Crystal Unit**

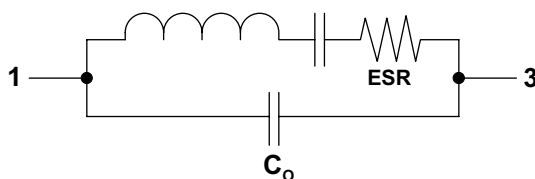


SM2016-4

Electrical Characteristics

Characteristic	Sym	Notes	Minimum	Typical	Maximum	Units
Nominal Frequency	F_O			48.53000		MHz
Mode of Oscillation			Fundamental			
Storage Temperature Range			-40		+85	°C
Operating Temperature Range			-40		+85	°C
Frequency Stability over Operating Temperature Range			± 30 ppm			
Equivalent Series Resistance	ESR				50	Ω
Nominal Drive Level			8	10	12	μ W
Shunt Capacitance	C_O				2	pF
Load Capacitance	C_L			12		pF
Insulation Resistance			500 M Ω min @ 100 VDC			
Aging			± 1.0 ppm			
Standard Shipping Quantity on 178 mm (7") Reel				1000		units
Lid Symbolization (in addition to Lot and/or Date Codes)			2R // YW			

Crystal Equivalent Circuit



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

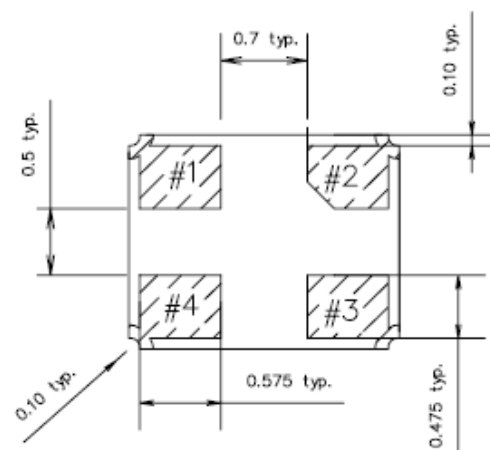
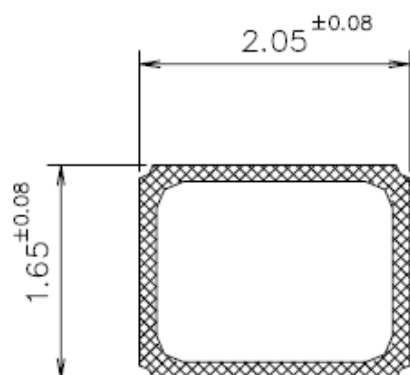
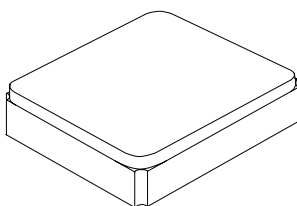
1. The design, manufacturing process, and specifications of this device are subject to change without notice.

SM2016-4 Case

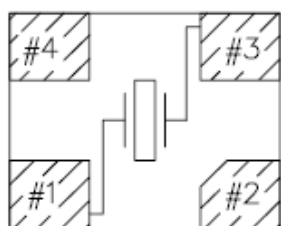
4-Terminal Ceramic Surface-Mount Case 2.0 X 1.6 mm Nominal Footprint

Electrical Connections

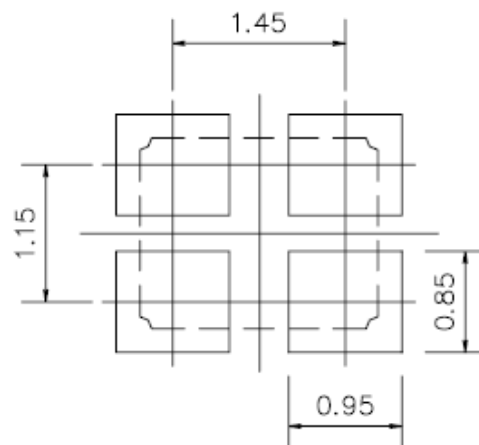
Connection	Terminals
Input / Output	1
Input / Output	3
Ground	2 & 4



Internal Connections (Top View)

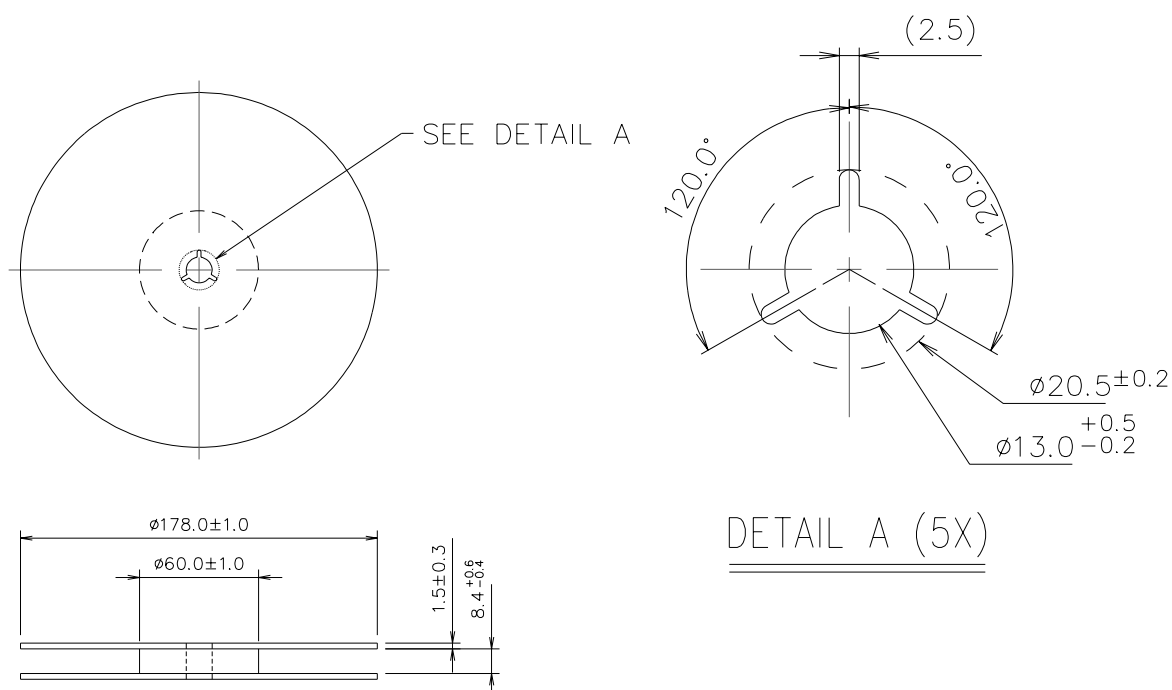


[NOTE] #2=NC, #4 is connected
with a metal cover

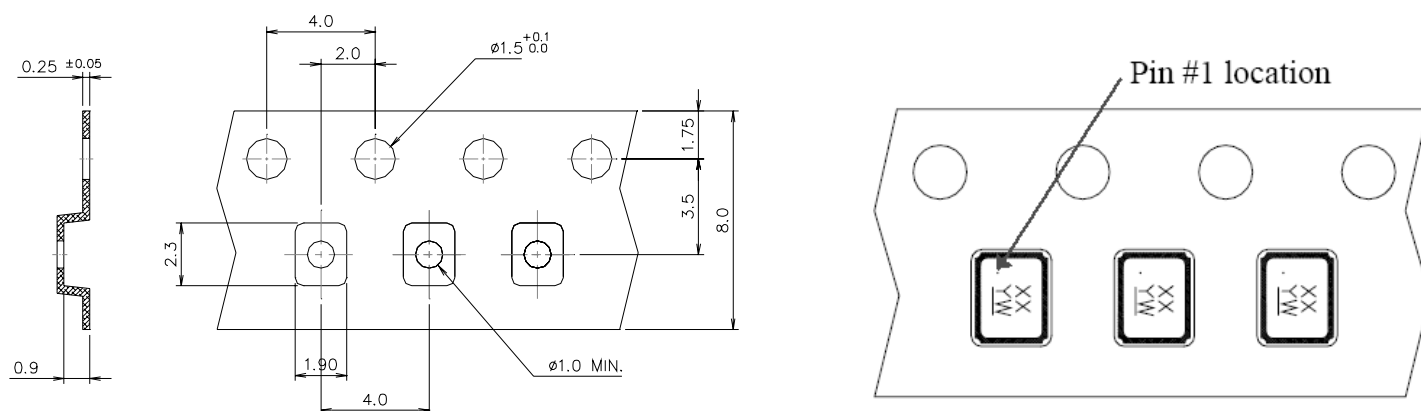


Recommended Land Pattern

Reel Dimensions (mm):



Tape Dimensions (mm):



NOTE:

1. Unless otherwise specified tolerance on dimension ± 0.1 mm.
2. Material: conductive polystyrene with color black.
3. 10 pitch cumulative tolerance ± 0.2 mm.