

SM3215-2

Features:

- Ceramic Seam Weld Package
- Excellent Reliability Performance
- Ultra Miniature Package
- Available to Surface Mount Technology and IR Reflow Process
- AEC-Q200 Compliant
- Moisture Sensitive Level (MSL): Level 1

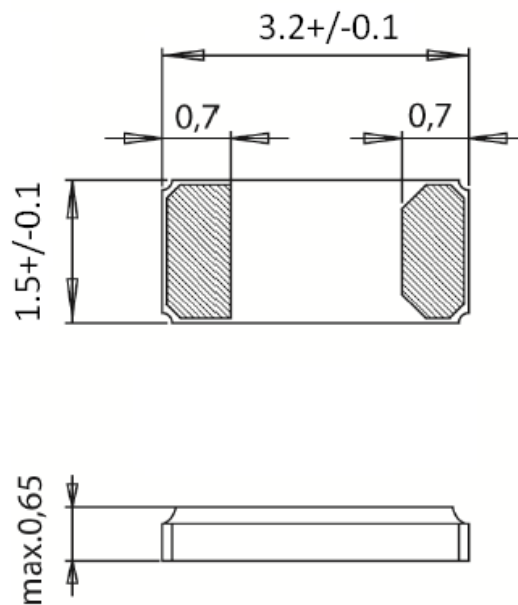
Description and Applications:

Surface mount 3.2mmx1.5mm crystal unit for use in communications devices,.

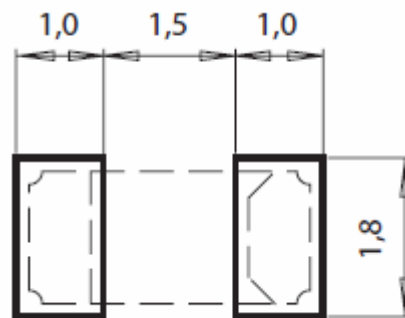
Electrical Specifications:

XTL2049P	Specification
Nominal Frequency	32.768000 KHz
Storage Temperature Range	-40°C to +125°C
Operating Temperature Range	-40°C to +125°C
Turnover Temperature	25 +/- 5 °C
Parabolic Curvature Constant	-0.04 ppm/°C ² max.
Frequency Make Tolerance (FL)	+/-20 ppm
Equivalent Series Resistor (ESR)	70 kΩ max .
Load Capacitance (CL)	6 pF
Drive Level	1.0 uW max.
Shunt Capacitance (Co)	1.8 pF max.
Aging	+/-3.0 ppm / 1 st year
Insulation Resistance	500M Ω min at DC 100V +/-15V
Marking	Laser marking

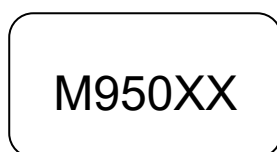
Mechanical Dimensions (mm):



Recommended Land Pattern: (unit: mm)



Marking:

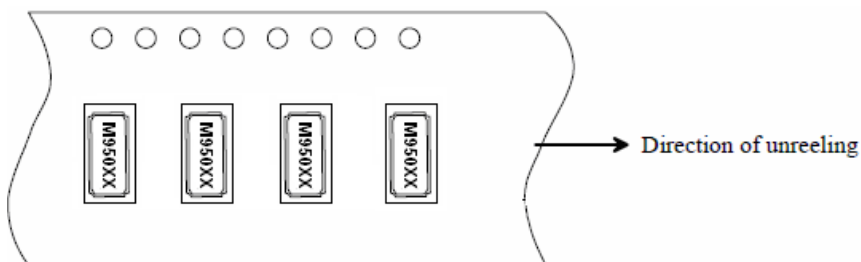


M: Metal Lid

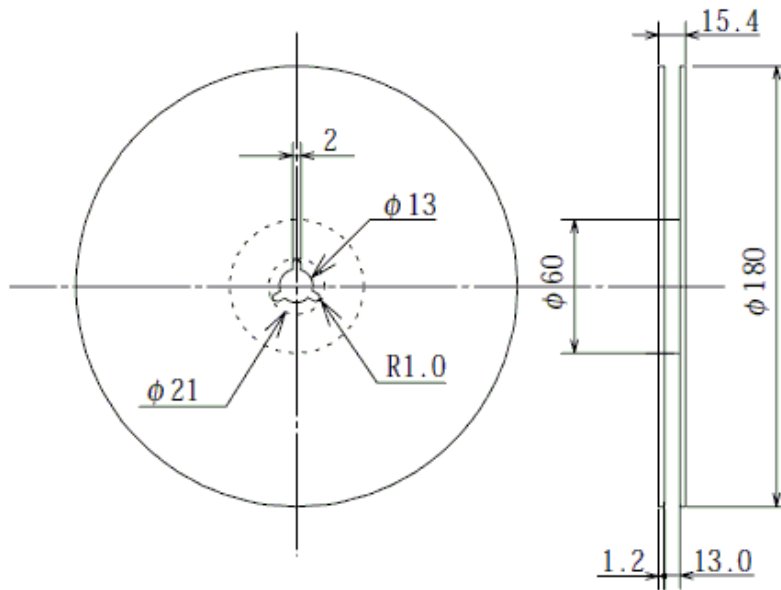
9 : Year code : 9 for 2019

50 : Week code

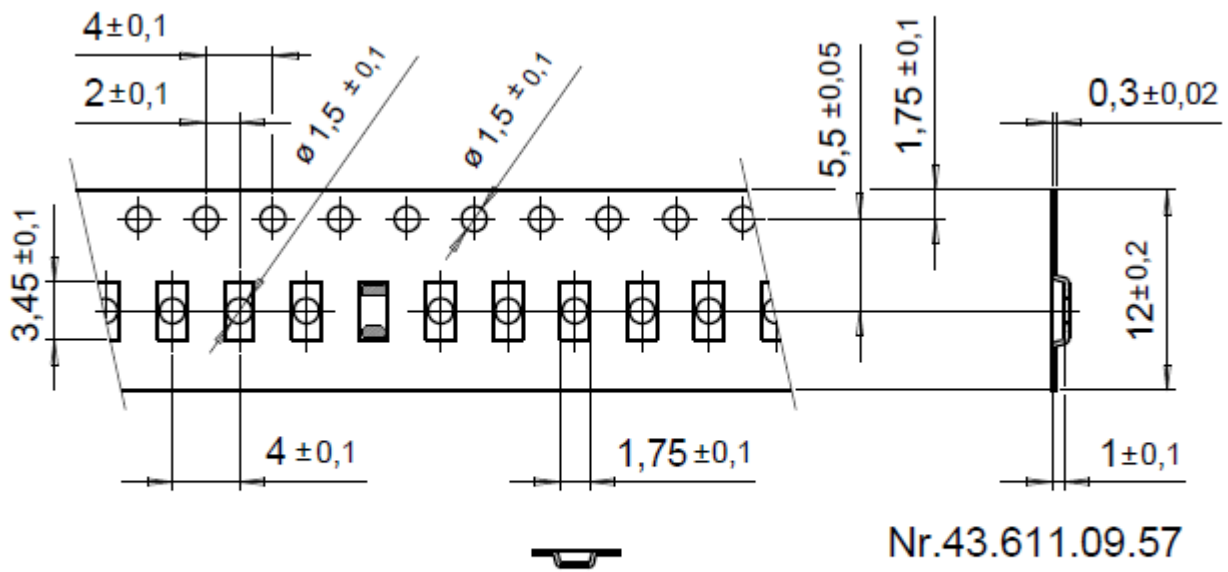
XX: Lot number



Reel Dimensions (mm):



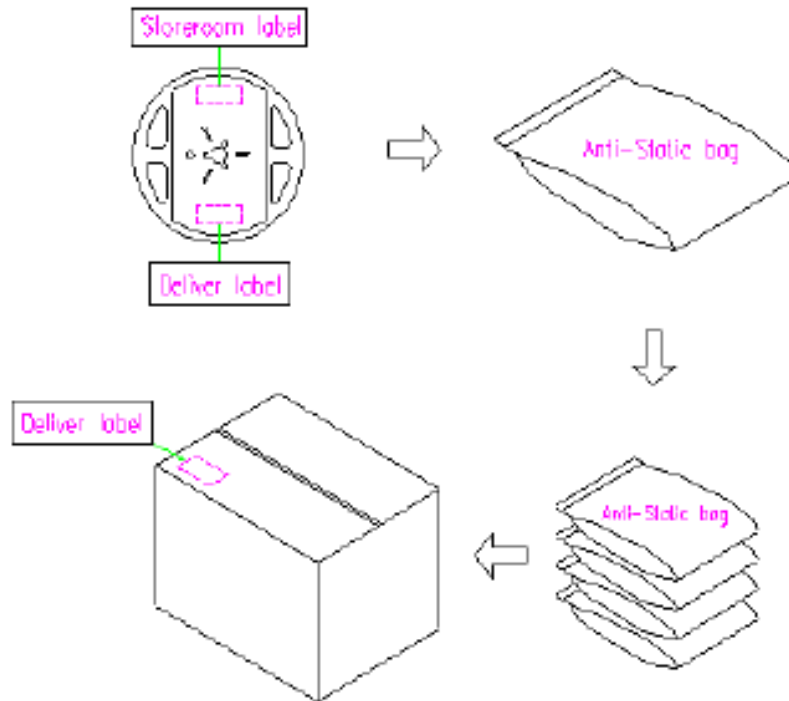
Tape Dimensions (mm):



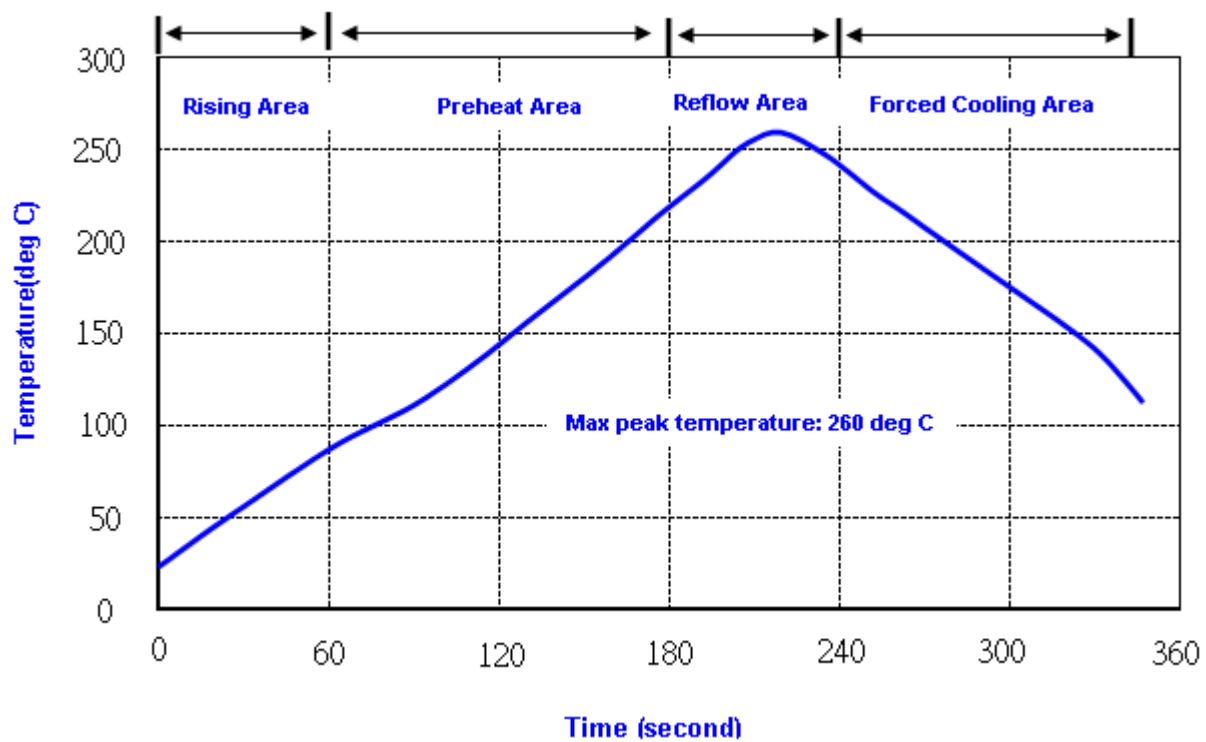
User Direction of Feed

Packing Quantity/Packing:

3K pcs maximum per reel



Reflow Profile:



Reliability Specifications (AEC-Q200)

Test name	Test process / method	Reference standard
Mechanical characteristics		
resistance to Soldering heat (IR reflow)	Temp./ Duration : 265°C /10sec ×2 times Total time : 4min.(IR-reflow)	EIAJED-4701 -300(301)M(II)
Vibration	Total peak amplitude : 1.5mm Vibration frequency : 10 to 2000 Hz Sweep period : 20 minute Vibration directions : 3 mutually perpendicular	MIL-STD 202G method 204
Mechanical Shock	directions : 3 impacts per axis Acceleration : 6000g's, +20/-0 % Duration : 0.3 ms (total 18 shocks) Waveform : Half-sine	MIL-STD 202G method 213
Solderability	Solder Temperature:265±5°C Duration time: 5±0.5 seconds.	J-STD-002
Environmental characteristics		
Thermal Shock	Heat cycle conditions -55 °C (30min) ↔ 125 °C (30min) * cycle time : 1000 times	MIL-STD 883G method 1010.8
Humidity test	Temperature : 85 ± 2 °C Relative humidity : 85% Duration : 1000 hours	MIL-STD 202G method 103
Dry heat (Aging test)	Temperature : 125 ± 2 °C Duration : 1000 hours	MIL-STD 202G method 108A
Cold resistance (Low Temp Storage)	Temperature : -40 ± 3 °C Duration : 1000 hours	IEC 60068-2-1



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. This component was always RoHS compliant from the first date of manufacture.