



RFM Integrated Device, Inc.

## PRODUCT SPECIFICATION

Part Number: XTL2026

Description:  
XTAL,32.768KHz,  
+/-20ppm@25C+/-3C

## Features:

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



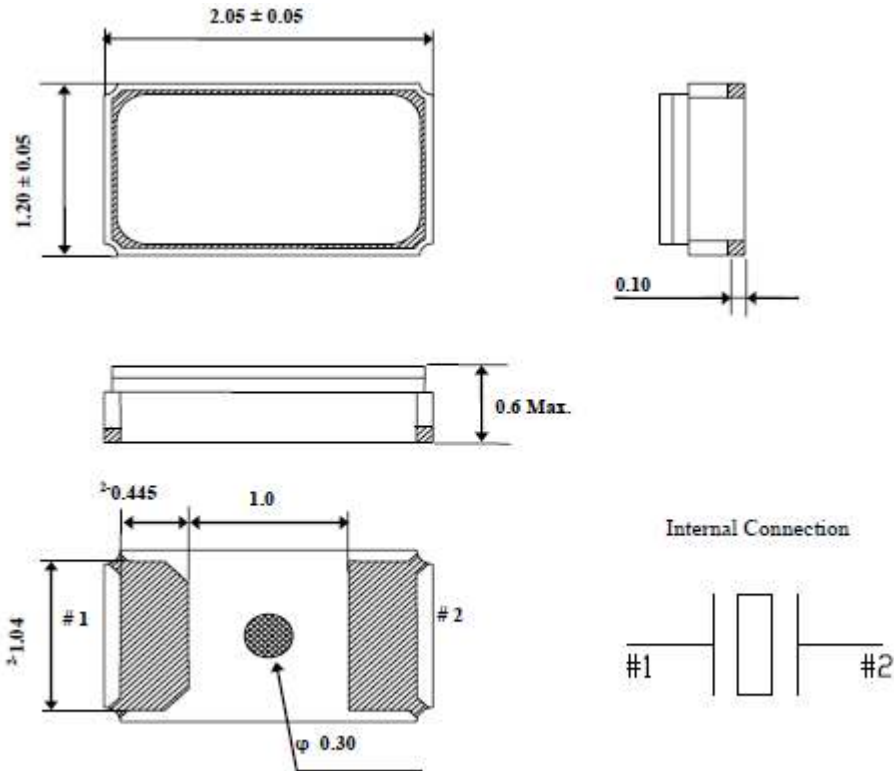
## Description and Applications:

Surface mount 2.0mmx1.2mm crystal unit for use in communications devices,.

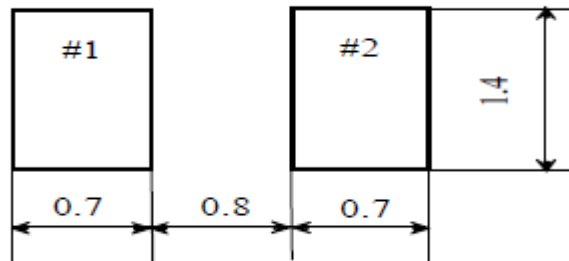
## Electrical Specifications:

<b>XTL2026</b>	<b>Specification</b>
Nominal Frequency	32.768000 KHz
Storage Temperature Range	-55°C to +125°C
Operating Temperature Range	-40°C to +85°C
Turnover Temperature	25 +/- 5°C
Parabolic Curvature Constant	-0.04 x10 <sup>-6</sup> °C <sup>2</sup> max.
Frequency Make Tolerance (FL)	+/-20 ppm @ 25°C +/- 3°C
Equivalent Series Resistor (ESR)	80 kΩ max.
Drive Level	0.5 uW max.
Motional Capacitance (C1)	6.4 fF typ.
Shunt Capacitance (Co)	1.3 pF typ.
Load Capacitance (CL)	12.5 pF
Insulation Resistance	500M Ω min at DC 100V +/-15
Aging	+/-3.0 ppm / year
Marking	Laser marking

## Mechanical Dimensions (mm):



## Recommended Land Pattern: (unit: mm)



## Marking:

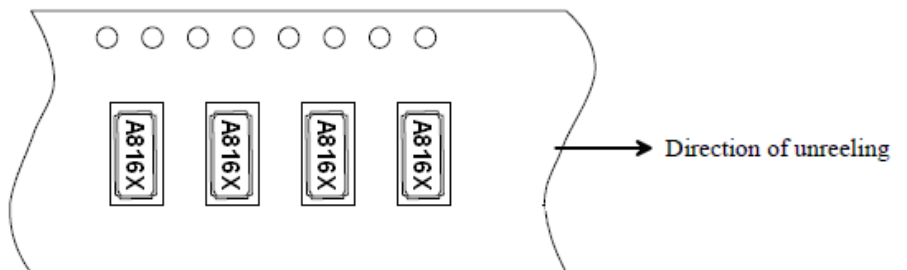
A816X

A : Nominal Frequency 32.768KHz

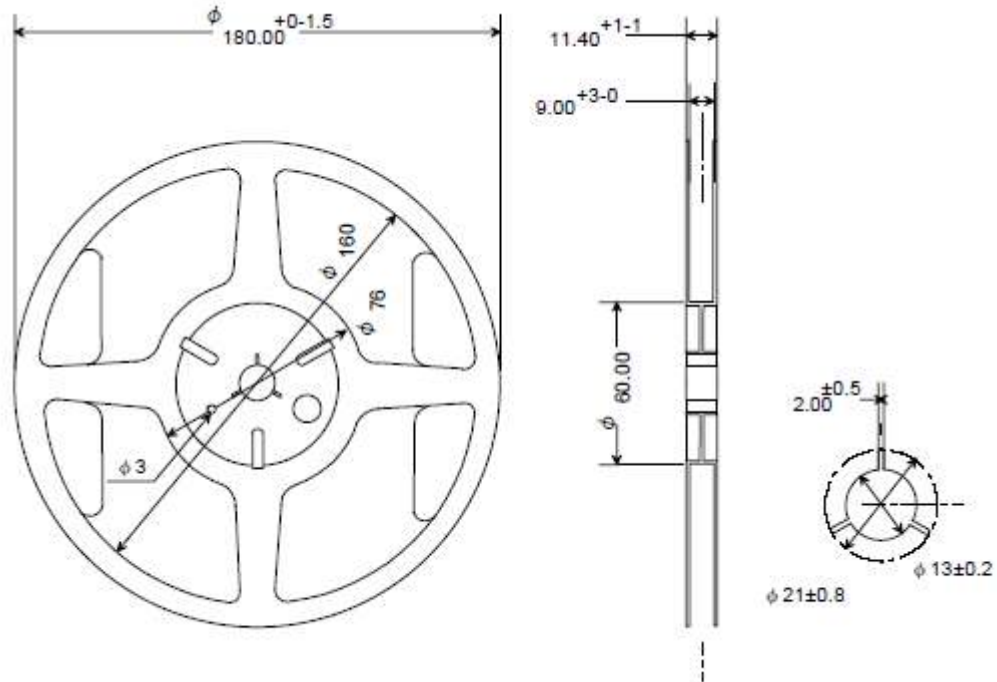
8 : Year code : 8 for 2018

16 : Week code

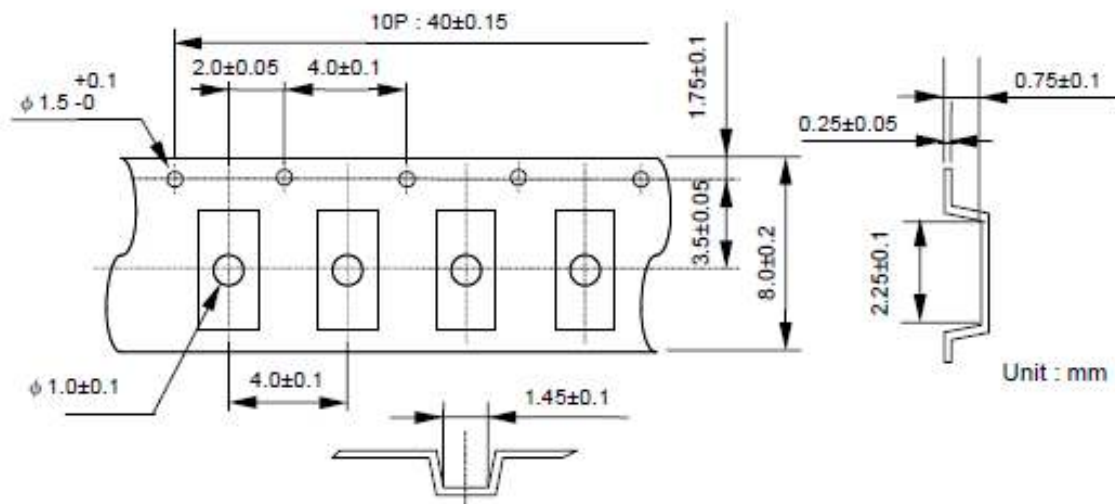
X : Traceability code



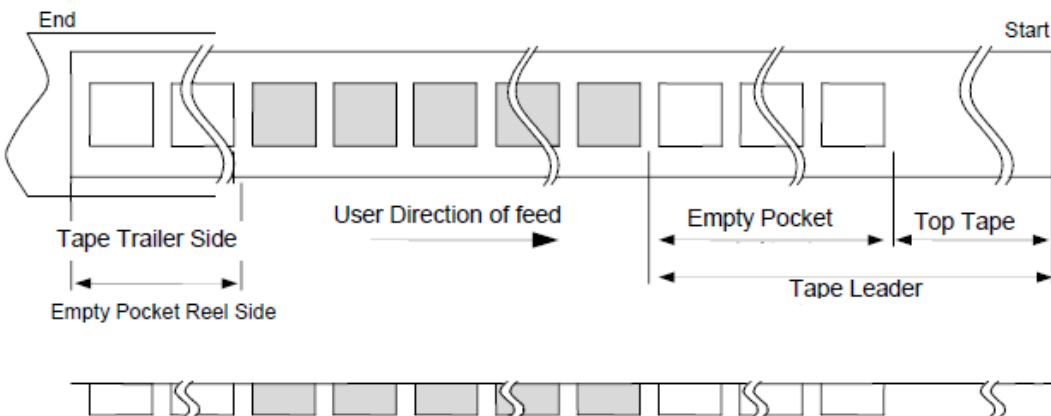
## Reel Dimensions (mm):



## Tape Dimensions (mm):

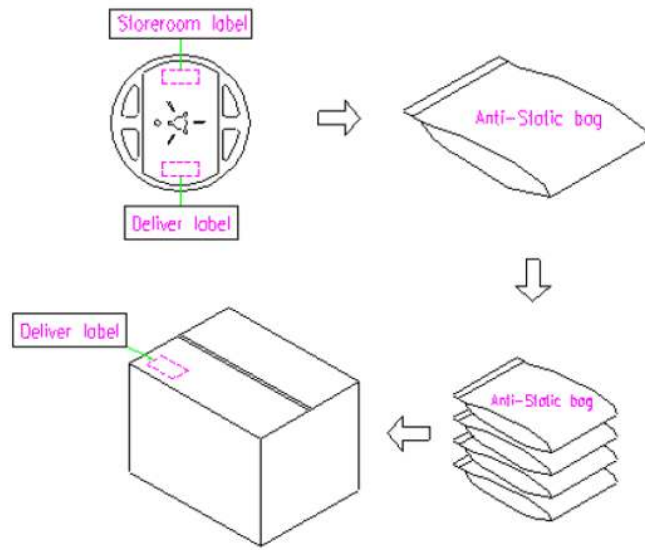


Unit : mm



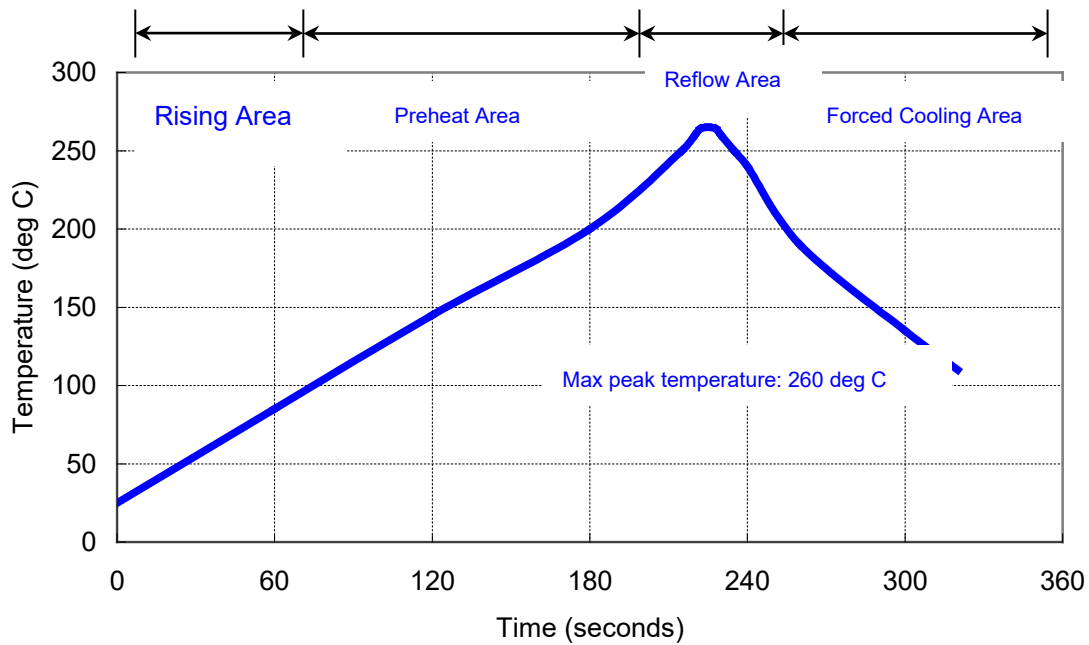
# Packing Quantity/Packing:

5K pcs maximum per reel



Deliver package carton  
1. L36xW35xH21cm-10 reel max.  
2. L38xW36xH32cm-15 reel max.

# Reflow Profile:



## Reliability Specifications

Test name	Test process / method	Reference standard
<b>Mechanical characteristics</b>		
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 Duration : 2 hr / direc.	MIL-STD 202G method 204
Mechanical Shock	directions : 3 impacts per axis Acceleration : 3000g'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
<b>Environmental characteristics</b>		
Thermal Shock	Heat cycle conditions -40 °C (30min) ↔ 85 °C (30min) * cycle time : 10 times	MIL-STD 883G method 1010.8
Humidity test	Temperature : 85 ± 2 °C Relative humidity : 85% Duration : 96 hours	MIL-STD 202G method 103
Dry heat ( Aging test )	Temperature : 125 ± 2 °C Duration : 168 hours	MIL-STD 202G method 108A
Cold resistance (Low Temp Storage)	Temperature : -40 ± 2 °C Duration : 96 hours	IEC 60068-2-1