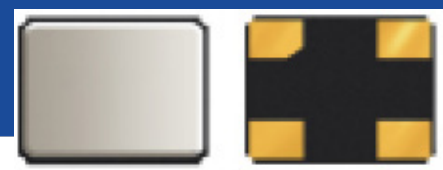
IoT OPTIMIZED LOW PROFILE QUARTZ CRYSTAL



ABM11W-101-32.0000MHZ-T3

2.0 x 1.6 x 0.5mm
RoHS/RoHS II Compliant

MSL = N/A: NOT APPLICABLE

FEATURES

- Optimized for energy saving wearables, and IoT applications
- 0.5 mm max height ideally suited for height constrained designs
- Seam sealed for longterm reliability

APPLICATIONS

- Wearables
- Internet of Things (IoT)
- Bluetooth/Bluetooth Low Energy (BLE)
- Wireless modules
- Machine-to-machine (M2M) connectivity
- Ultra-low power MCU
- Near Field Communication (NFC)
- ISM Band

KEY ELECTRICAL SPECIFICATIONS

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency		32.0000		MHz	
Operation Mode		Fundamental			
Operating Temperature Range	-40		+85	ºC	
Storage Temperature	-55		+125	ºC	
Frequency Tolerance @ +25°C	-10		+10	ppm	
Frequency Stability over the Operating Temperature (ref. to +25°C)	-20		+20	ppm	
Equivalent series resistance (R1)			80	Ω	
Shunt capacitance (C0)		<1.0	2.0	pF	
Load capacitance (CL)		8.0		pF	
Drive Level		10	100	µW	
Aging (1 year)	-2		+2	ppm	@ 25°C±3°C
Insulation Resistance	500			MΩ	@ 100Vdc ± 15V

PART IDENTIFICATION

ABM11W-101-32.0000MHz - [ ]

Packaging
Blank: Bulk
T3: 3kpcs / reel

ABRACON LLC
The Power of Linking Together

5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 03.19.2018

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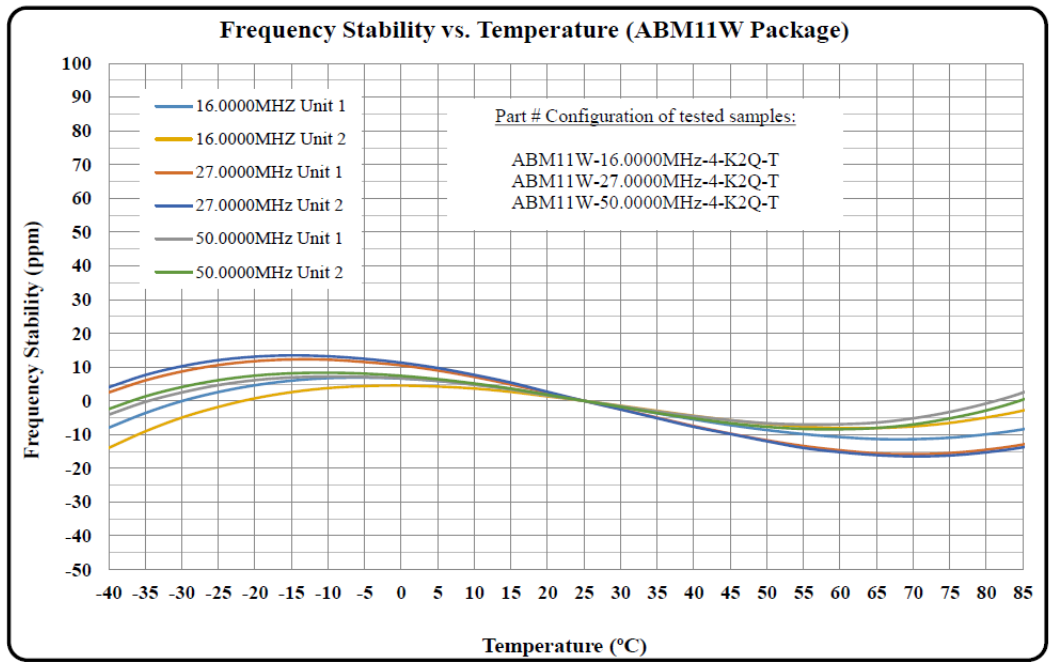
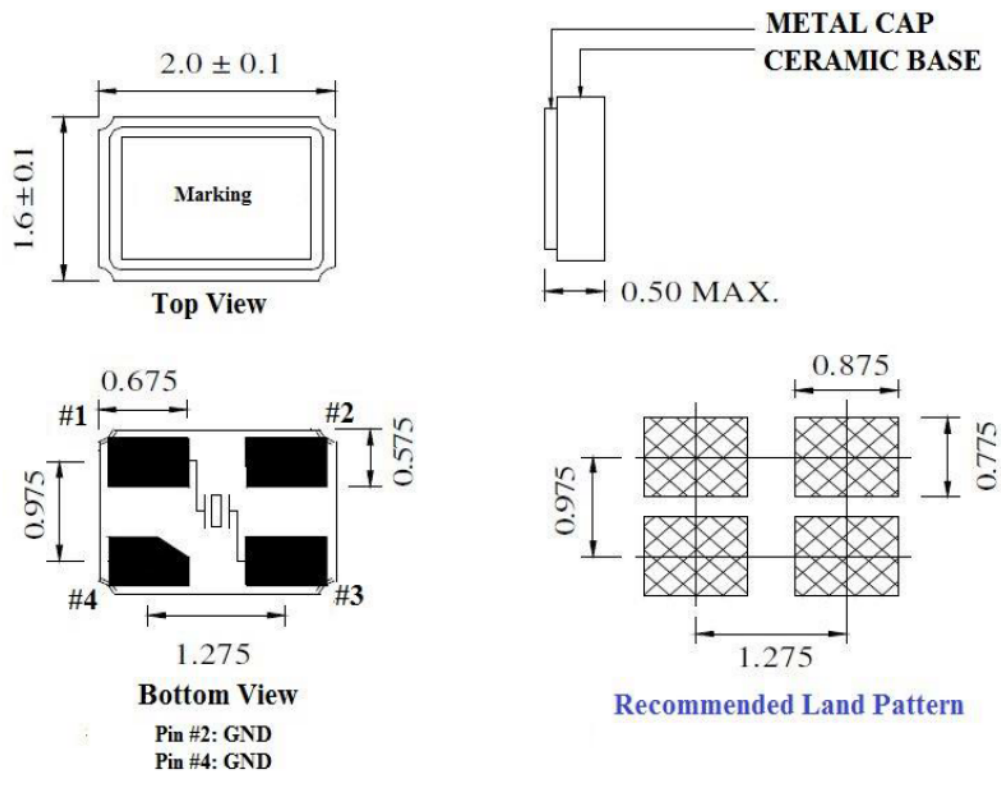
TYPICAL FREQUENCY vs. TEMPERATURE CHARACTERISTICS



MECHANICAL DIMENSIONS



Dimensions: mm

Note:
Due to material availability the Chamfer could be located on pin #1, 2 or 4. Be advised that the Chamfer location has no impact on the electrical performance of the device.

SEALING METHOD = GLASS SEALING

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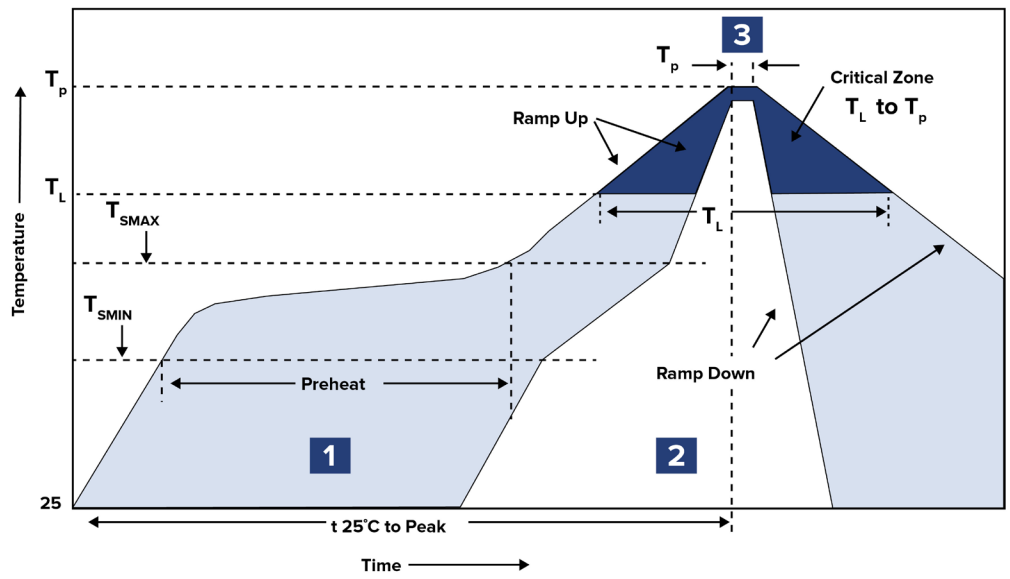
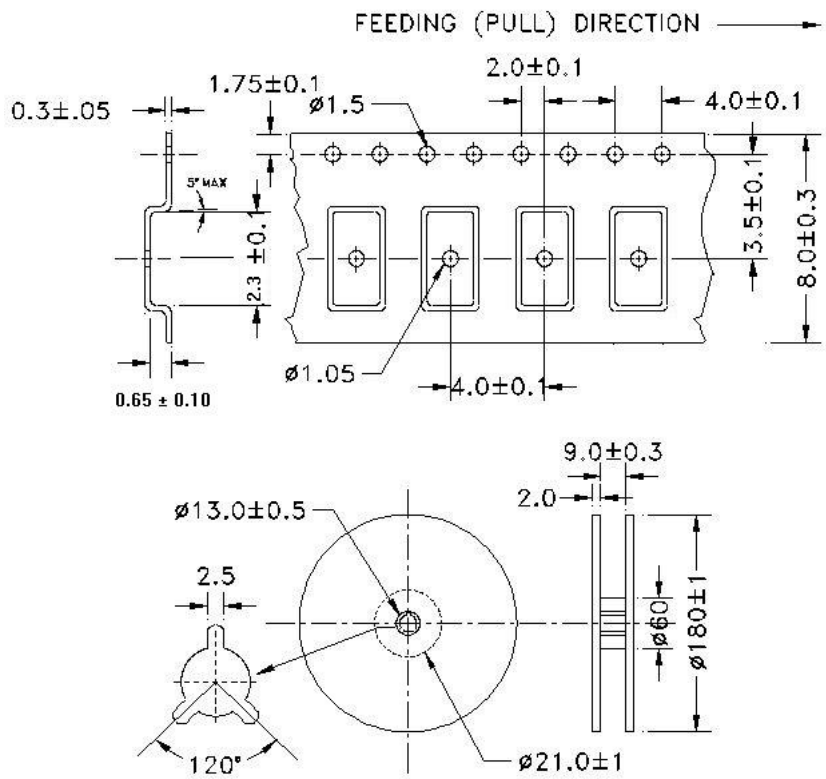
REFLOW PROFILE



Zone	Description	Temperature	Time
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T_L 217°C	45 ~ 90 sec.
3	Peak Heat	T_P 260°C MAX	10 sec.

PACKAGING:

T3: Tape and reel (3,000 pcs/reel)



Dimensions: mm

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