

# IoT OPTIMIZED LOW PROFILE QUARTZ CRYSTAL



2.0 x 1.6 x 0.50 mm

 RoHS/RoHS II Compliant

MSL = N/A: NOT APPLICABLE (See Note #1)

## FEATURES

- Optimized for low power consumption, wearables, and IoT applications
- Guaranteed low 40Ω ESR ensures operation in power sensitive solutions
- 0.50mm max height ideally suited for height constrained designs
- -40°C to 85°C industrial operating temperature range
- Seam sealed for long-term reliability

## APPLICATIONS

- Wearables
- Internet of Things (IoT)/Industrial (IIoT)
- Bluetooth/Bluetooth Low Energy (BLE)
- Wireless modules
- Machine-to-machine (M2M) connectivity
- Ultra-low power MCU
- WiFi

## STANDARD SPECIFICATIONS

| PARAMETERS                                                          | MINIMUM     | TYPICAL | MAXIMUM | UNITS | NOTES          |
|---------------------------------------------------------------------|-------------|---------|---------|-------|----------------|
| Frequency                                                           | 26.000      |         |         | MHz   |                |
| Operation Mode                                                      | Fundamental |         |         |       |                |
| Operating Temperature                                               | -40         |         | +85     | °C    |                |
| Storage Temperature                                                 | -40         |         | +125    | °C    |                |
| Frequency Tolerance @+25°C                                          | -10         |         | +10     | ppm   | See Note#1     |
| Frequency Stability over the Operating Temperature ( ref. to +25°C) | -30         |         | +30     | ppm   | See Note#2     |
| Equivalent series resistance (R1)                                   |             |         | 40      | Ω     |                |
| Shunt capacitance (C0)                                              |             |         | 2       | pF    |                |
| Load capacitance (CL)                                               | 8           |         |         | pF    |                |
| Drive Level                                                         |             | 10      | 100     | μW    |                |
| Aging@25°C±3°C                                                      |             |         | ±3      | ppm   | First year     |
| Insulation Resistance                                               | 500         |         |         | MΩ    | @ 100Vdc ± 15V |

**Note#1:** Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive

**Note#2:** Referenced to crystal resonant frequency, into an oscillator loop effective load of 8pF

**Note#3:** Referenced to the measured frequency at 25°C±3°C, into an oscillator loop effective load of 8pF

REVISED: 06/21/2016



5101 Hidden Creek Lane Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sale visit:  
[www.abracon.com](http://www.abracon.com)

ABRACON IS  
ISO9001-2008  
CERTIFIED

IoT OPTIMIZED LOW PROFILE QUARTZ CRYSTAL



2.0 x 1.6 x 0.50 mm

Pb RoHS/RoHS II Compliant

MSL = N/A: NOT APPLICABLE (See Note #1)

ABM11-141-26.000MHz

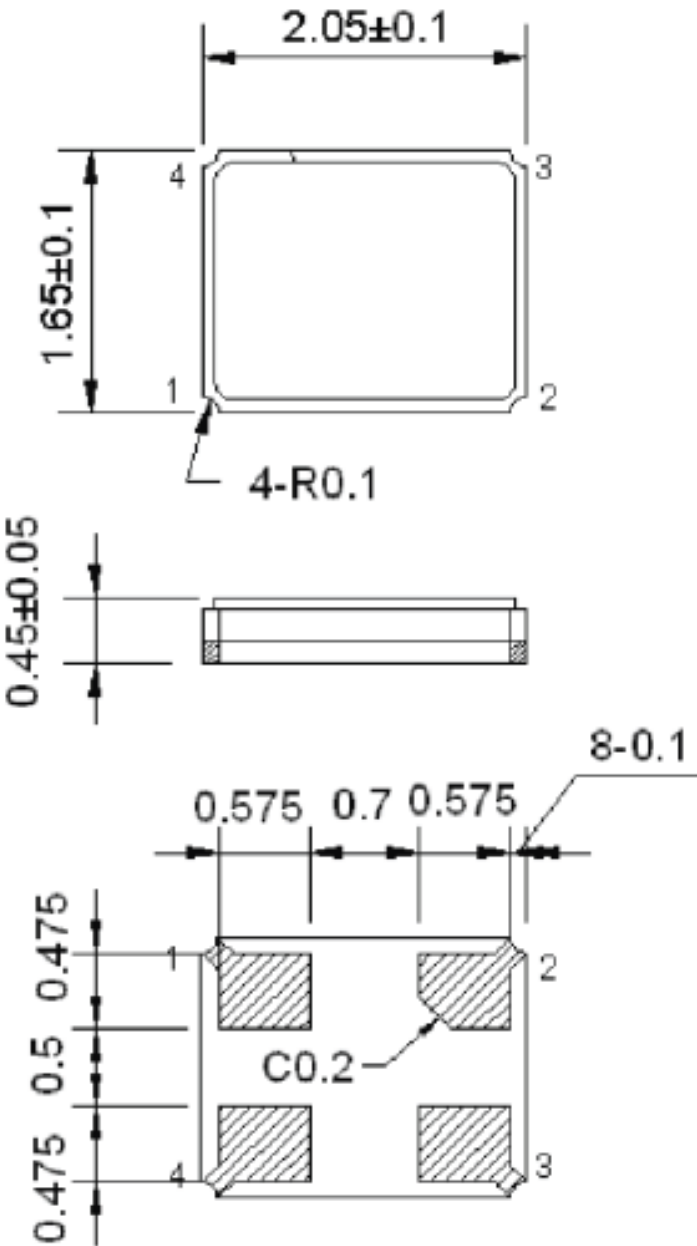
PART IDENTIFICATION AND ORDERING INFORMATION

ABM11-141-26.000MHZ-

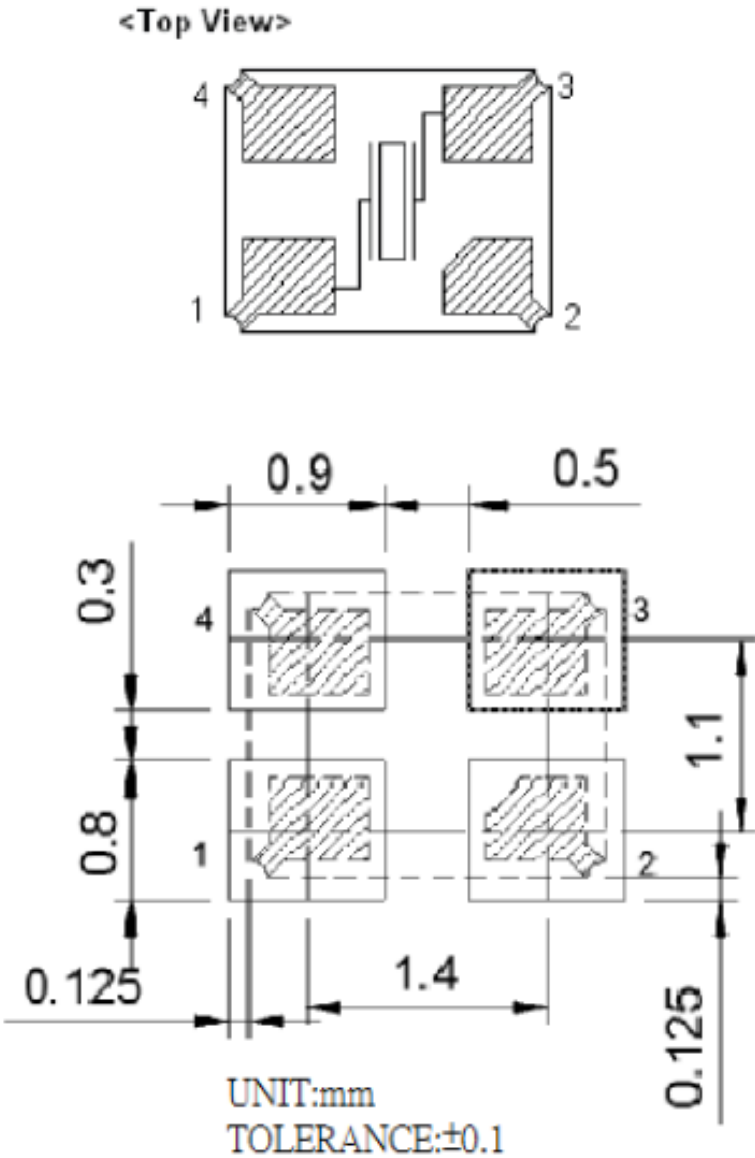


| PACKAGING   |
|-------------|
| Blank: Bulk |
| T3: 3K/Reel |

MECHANICAL DIMENSIONS (ALL DIMENSIONS ARE IN MM)



RECOMMENDED LAND PATTERN



# IoT OPTIMIZED LOW PROFILE QUARTZ CRYSTAL

# ABM11-141-26.000MHz

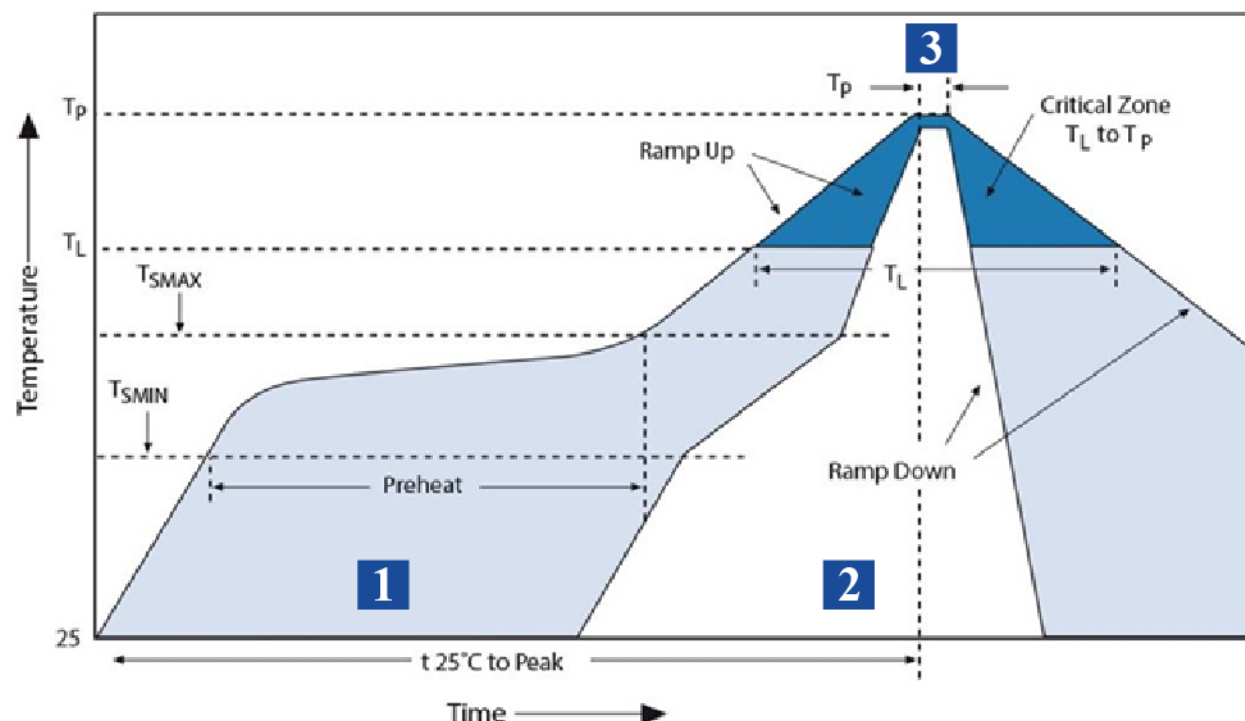


**2.0 x 1.6 x 0.50 mm**

 **RoHS/RoHS II Compliant**

MSL = N/A: NOT APPLICABLE (See Note #1)

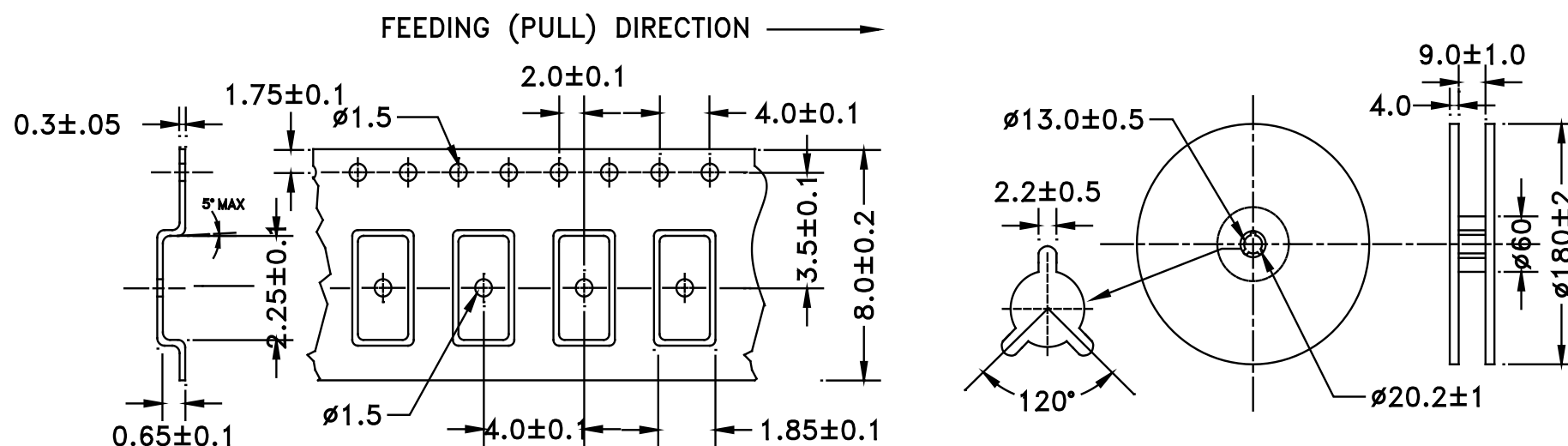
## REFLOW PROFILE



| Zone | Description | Temperature                          | Time        |
|------|-------------|--------------------------------------|-------------|
| 1    | Preheat     | $T_{SMIN} - T_{SMAX}$<br>160°C~180°C | 120 sec.    |
| 2    | Reflow      | $T_L$<br>60°C                        | 60 sec.     |
| 3    | Peak Heat   | $T_P$<br>260°C                       | 10 sec. MAX |

## PACKAGING

### T3: 3000PCS/REEL



REVISÉ: 06/21/2016



5101 Hidden Creek Lane Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sale visit:  
[www.abracon.com](http://www.abracon.com)

ABRACON IS  
ISO9001-2008  
CERTIFIED