

# ULTRA MINIATURE CERAMIC SMD CRYSTAL



ABM12

1.6 x 1.2 x 0.45mm

ABM12



RoHS/RoHS II Compliant

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable

## FEATURES:

- Suitable for RoHS reflow profile
- Available tight tolerance and stability
- Electron beam sealed ceramic package assures high precision and reliability

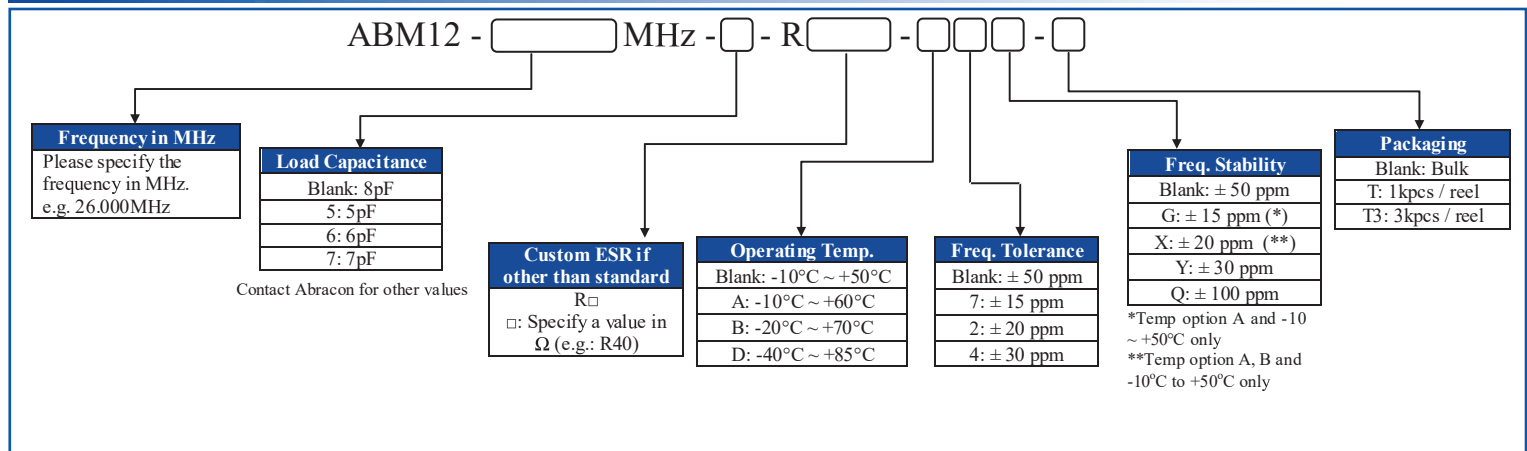
## APPLICATIONS:

- Blue-tooth, Wireless applications
- Computers, Modems, Microprocessors
- Communication, Test equipment
- High density applications
- PCMCIA
- Portable radios and MP3 players

## STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	24.000		80.000	MHz	
Standard Frequencies	26.000, 32.000 and 36.000MHz				(Contact Abracon for other frequencies)
Operation Mode	Fundamental				
Operating Temperature	-10		+50	°C	See options
Storage Temperature	-40		+85	°C	
Frequency Tolerance @+25°C	-50		+50	ppm	See options
Frequency Stability over the Operating Temperature ( ref. to +25°C)	-50		+50	ppm	See options
Equivalent series resistance (R1) (Effective 8/14/2012)			200	Ω	24.000~39.999MHz
			100		40.000~80.000 MHz
Shunt capacitance (C0)			5	pF	
Load capacitance (CL)	8			pF	Standard (See options if other than STD)
Drive Level		10	100	μW	
Aging	-5		+5	ppm	@25°C±3°C First year
Insulation Resistance	500			MΩ	@ 100Vdc ± 15V

## OPTIONS & PART IDENTIFICATION: (Left blank if standard)



REVISED: 05.02.2018



5101 Hidden Creek Lane Spicewood TX 78669  
 Phone: 512-371-6159 | Fax: 512-351-8858  
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[www.abracon.com](http://www.abracon.com)

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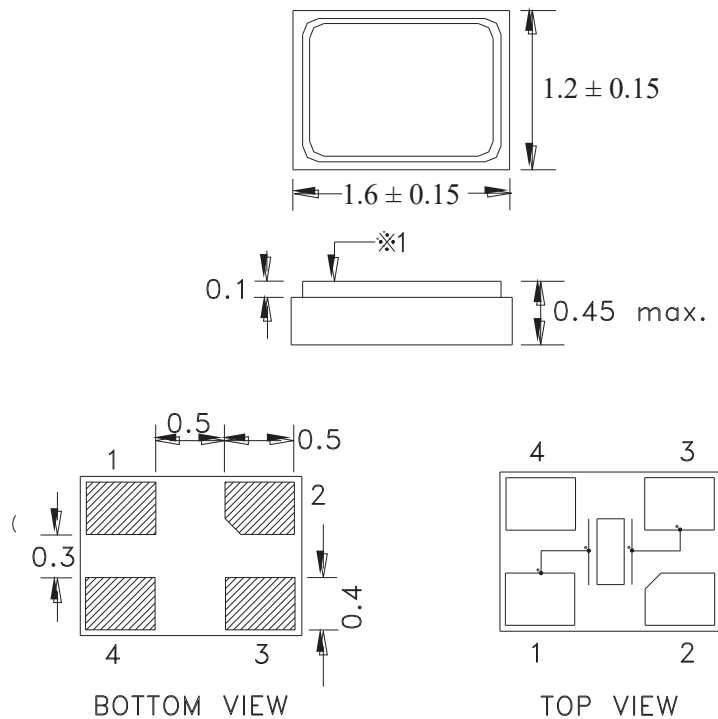


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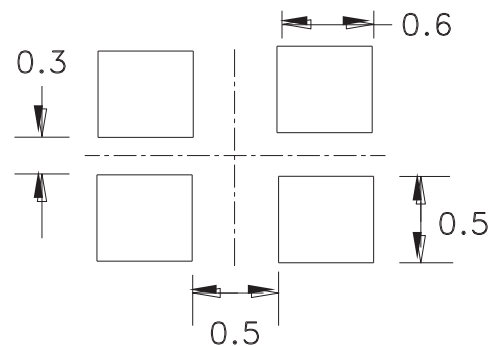
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## OUTLINE DRAWING:



Recommended land pattern



Pin 2 is connected to the metal lid (\*1).  
(Please connect to GND)

Note 1: Due to material availability, the outline and finish color of the component lid may vary. This variation in no way affects the electrical performance of the product.

Note 2: Due to materials availability, this part may be manufactured with the chamfer on pin 1, 2 or 4. This variation in no way affects the electrical performance of the product.

Dimensions: mm

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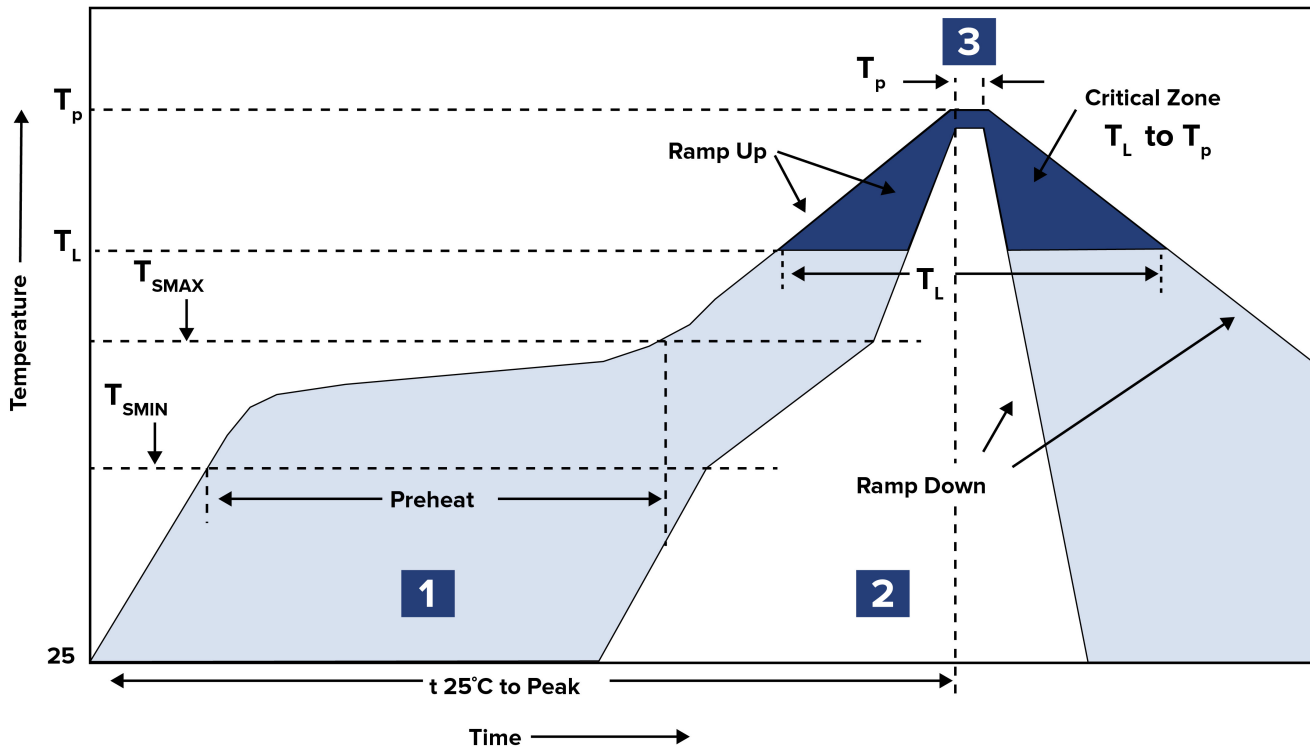
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## REFLOW PROFILE:



Zone	Description	Temperature	Time
1	Preheat / Soak	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 180°C	60 ~ 120 sec
2	Reflow	$T_L$ 230°C	30 ~ 40 sec
3	Peak heat	$T_P$ 260°C±5°C	10 sec. MAX

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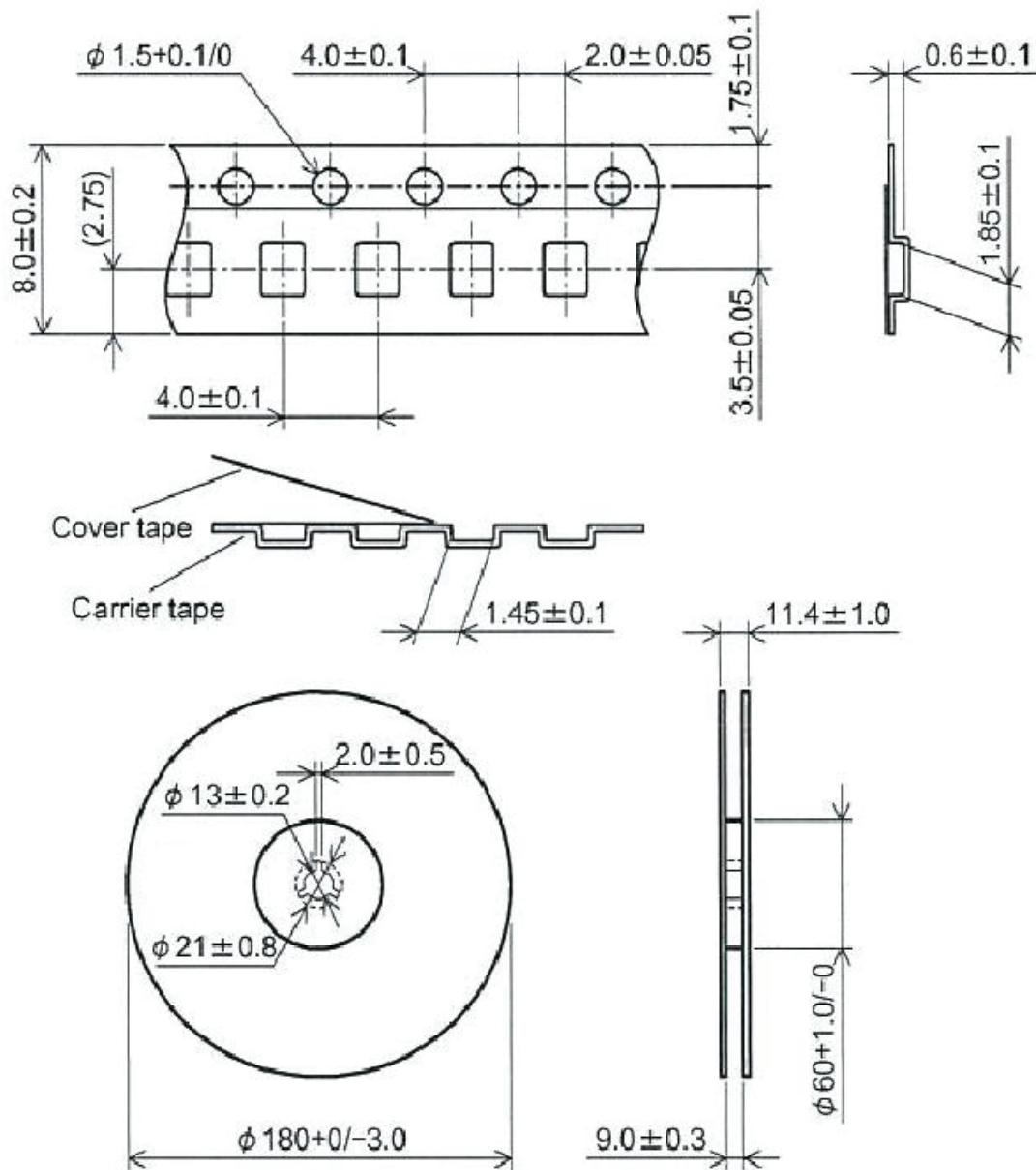
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## TAPE & REEL:

**Option "-T":** Tape and reel (1,000pcs/reel)

**Option "-T3":** Tape and reel (3,000pcs/reel)



Dimensions: mm