

# CERAMIC SURFACE MOUNT LOW PROFILE QUARTZ CRYSTALS

ABMM2



**RoHS**  
Compliant

ABMM2



6.0 x 3.6 x 1.2 mm

## FEATURES:

- Suitable for RoHS compliant reflow
- Low height 1.2 mm max
- Seam sealed ceramic package assures high reliability
- Available tight tolerance and stability

## APPLICATIONS:

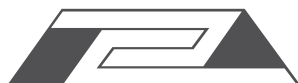
- Computers, Modems, Microprocessors
- Communication, Test equipment
- PCMCIA

## STANDARD SPECIFICATIONS:

Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range		7.3728	-----	110.00	MHz	
Operation Mode	7.3728 – 30.00MHz	Fundamental			-----	Standard
	30.01 – 100.00MHz	3 <sup>rd</sup> Overtone			-----	Standard
	100.01 – 110.00MHz	5 <sup>th</sup> Overtone			-----	Standard
	30.01 – 50.00MHz	Fundamental			-----	See options
Operating Temperature		-10	-----	+60	°C	See options
Storage Temperature		-40	-----	+85	°C	
Frequency Tolerance @+25°C		-20	-----	+20	ppm	See options
Frequency Stability over the Operating Temperature ( ref. to +25°C)		-20	-----	+20	ppm	See options
Equivalent series resistance (R1)		See table 1 below			Ω	
Shunt capacitance (C0)		-----	-----	7.0	pF	
Load capacitance (CL)		-----	18.0	-----	pF	Standard (See options if other than STD)
Drive Level		-----	100	500	μW	
Aging		-2	-----	+2	ppm	@25°C±3°C First year
Insulation Resistance		500	-----	-----	MΩ	@ 100Vdc ± 15V

**TABLE 1- Standard ESR**

Frequency (MHz)	ESR(Ω) max
7.3728 -7.999999 (Fund)	150
8.000 -9.999999 (Fund)	72
10.000 -50.000 (Fund)	50
30.000 – 100.000 (3 <sup>rd</sup> OT)	60
100.001 – 110.000 (5 <sup>th</sup> OT)	80

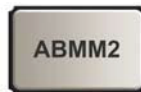


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## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABMM2 -  MHz -  -  -  -  -

### Frequency in MHz

Please specify the frequency in MHz.  
e.g. 16.000MHz

### Load Capacitance (pF)

Please specify CL in pF  
(8 to 33pF) or S for series  
Please contact Abracon  
for other values

### Custom ESR if other than standard

R  
□: Specify a value in  
 $\Omega$  (e.g.: R40)

### Freq. Tolerance

1:  $\pm 10$  ppm  
7:  $\pm 15$  ppm

### Packaging

Blank: Bulk  
T: 1000pcs / reel  
T2: 250pcs / reel

### Freq. Stability

Blank: Standard  
F; fund. AT for  
F>30MHz

### Frequency Stability (ppm)

Operating Temp.	$\pm 10$	$\pm 20$	$\pm 30$	$\pm 50$	$\pm 100$
0°C ~ +50° C	A3	A4	A6	-----	-----
-10°C ~ +50°C	B3	B4	B6	-----	-----
-10°C ~ +60°C	C1	Std	C6	-----	-----
-20°C ~ +70°C	E1	E2	E6	-----	-----
-40°C ~ +85°C	-----	D1	D6	D5	-----
-40°C ~ +1 05°C	-----	-----	-----	J5	J10
-40°C ~ +1 25°C	-----	-----	-----	K5	K10



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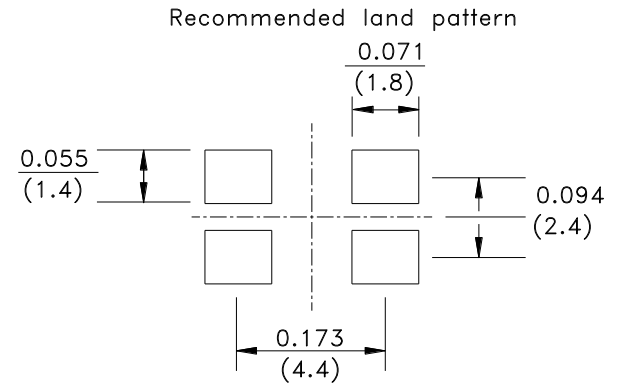
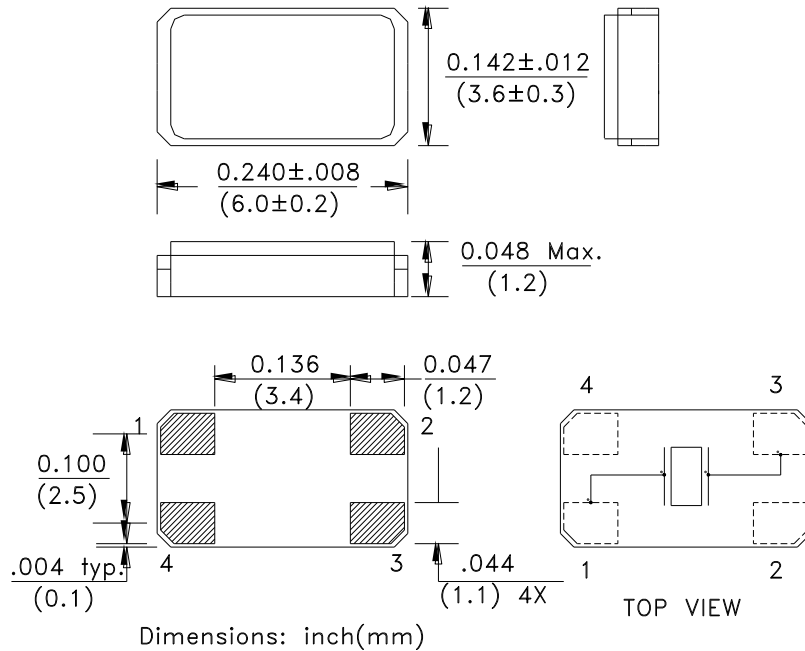


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6.0 x 3.6 x 1.2 mm

## OUTLINE DRAWING:

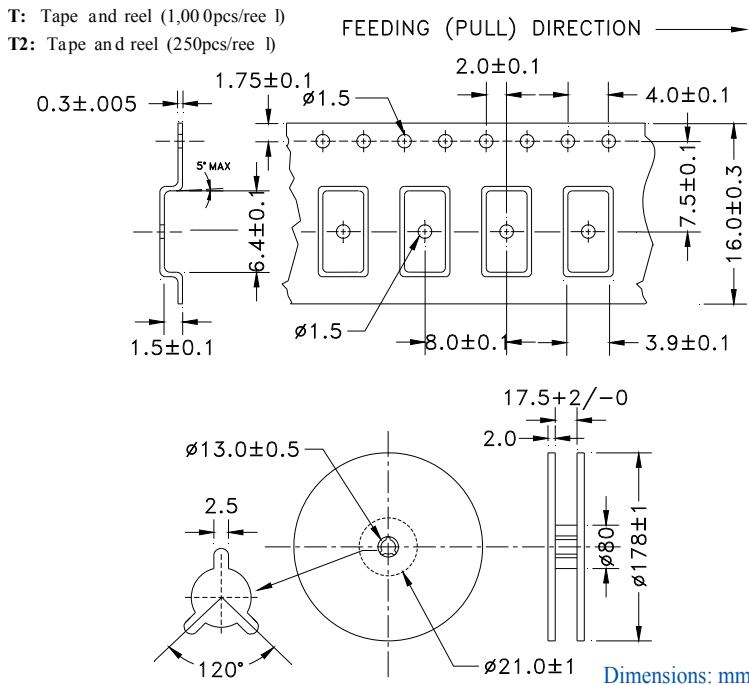


Dimensions: inches (mm)

Note 1: A chamfer of 0.3mm may appear on pad 1 or 4

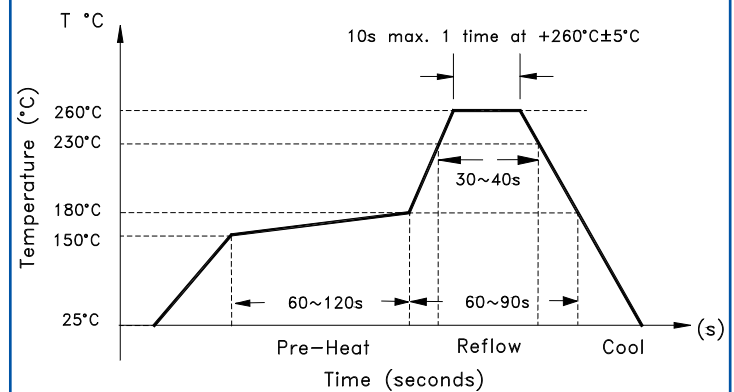
Note 2: A rounded pad may appear on pad 1

## TAPE & REEL:



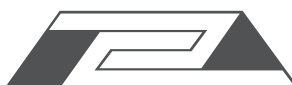
Dimensions: mm

## REFLOW PROFILE



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Revised: 07.22.11

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