

# CERAMIC SURFACE MOUNT LOW PROFILE QUARTZ CRYSTALS

ABMM2



6.0 x 3.6 x 1.2 mm

ABMM2

 RoHS/RoHS II Compliant

## 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

# CERAMIC SURFACE MOUNT LOW PROFILE QUARTZ CRYSTALS

ABMM2



6.0 x 3.6 x 1.2 mm

ABMM2

RoHS/RoHS II Compliant

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABMM2 -  MHz -  -  -  -  -  -

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

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

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

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

**Custom ESR if other than standard**  
R  
□: Specify a value in Ω (e.g.: R40)

**Freq. Tolerance**  
1: ± 10 ppm  
7: ± 15 ppm

Operating Temp.	Frequency Stability (ppm)				
	±10	±20	±30	±50	±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

ABRACON IS  
ISO9001:2008  
CERTIFIED

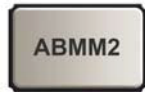


**ABRACON  
CORPORATION**

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

Revised: 01.18.13

# CERAMIC SURFACE MOUNT LOW PROFILE QUARTZ CRYSTALS

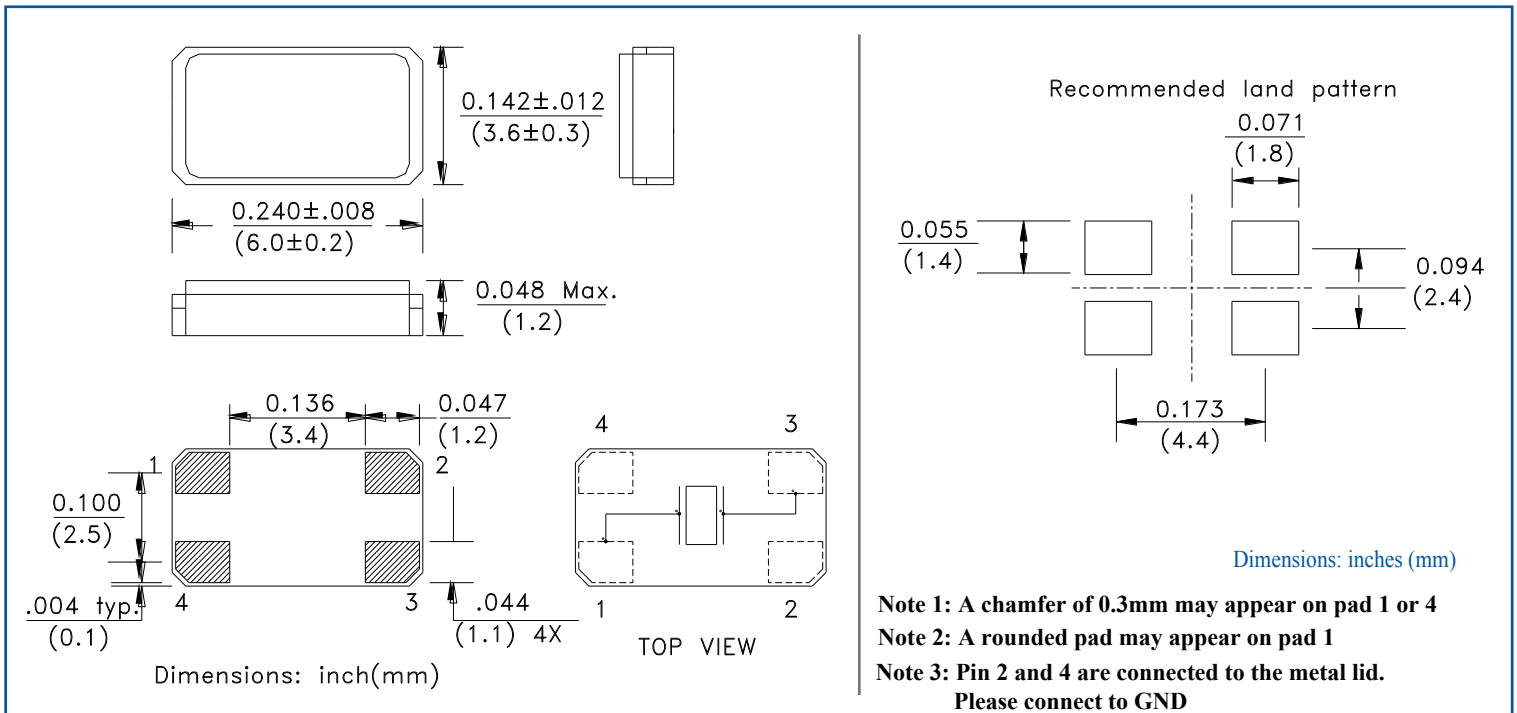


ABMM2

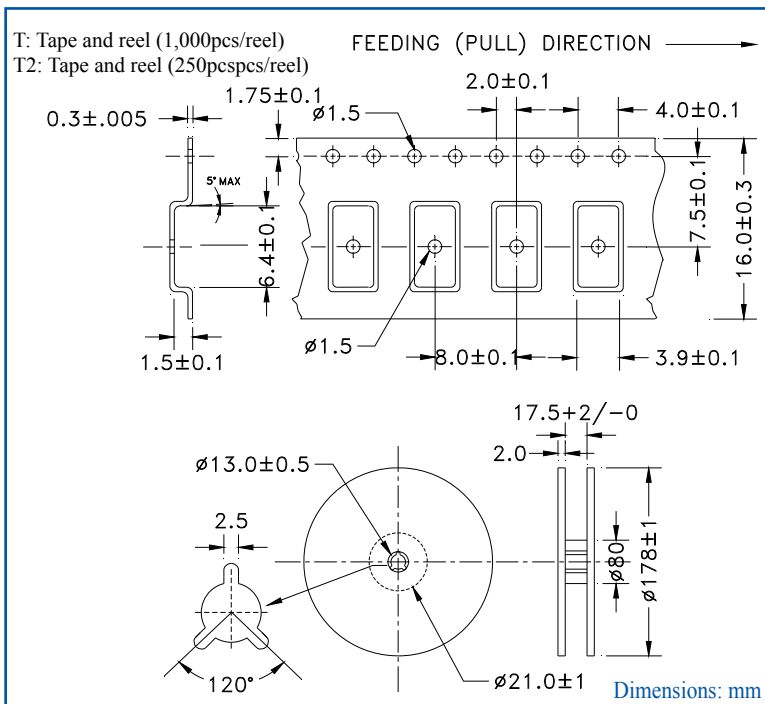
RoHS/RoHS II Compliant

6.0 x 3.6 x 1.2 mm

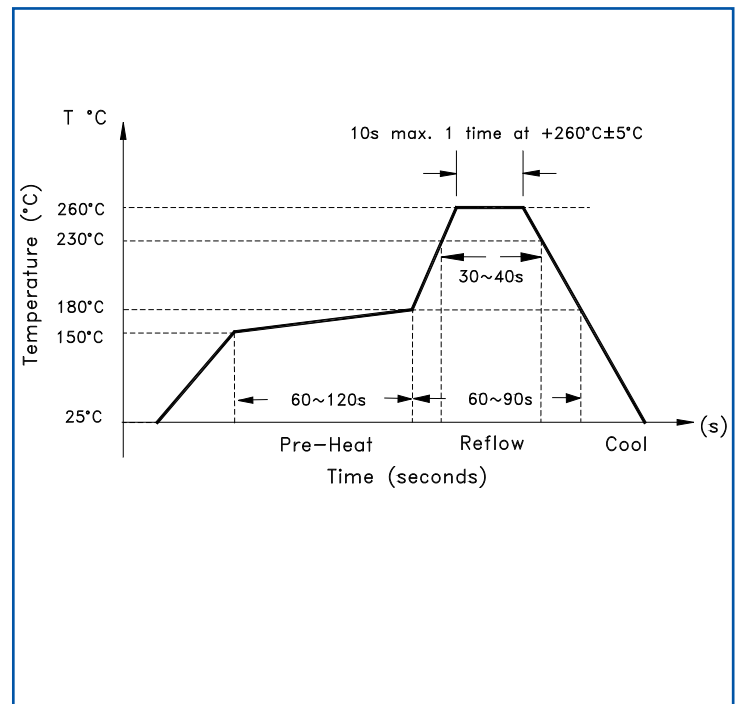
## OUTLINE DRAWING:



## TAPE & REEL:



## REFLOW PROFILE



**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS  
ISO9001:2008  
CERTIFIED



Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale  
 30332 Esperanza, Rancho Santa Margarita, California 92688  
 tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

Revised: 01.18.13