

# CERAMIC SURFACE MOUNT LOW PROFILE MICROPROCESSOR CRYSTAL



7.2 x 5.2 x 1.1 mm

ABMM1



RoHS  
Compliant

## FEATURES:

- IR reflow capable
- Low in height - reduced to 1.1mm
- Ideal for thin equipment
- AT cut offers a tight tolerance & stability

## APPLICATIONS:

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

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N	ABMM1 Series
Frequency Range	8.0 MHz to 125 MHz
Operation Mode	AT (see option) Fundamental 8.0 MHz - 33.0 MHz Third-Overtone for F ~ 33.01 MHz - 125 MHz
Operating Temperature	- 10°C to + 60°C (see options)
Storage Temperature	- 40°C to + 85°C
Frequency Tolerance at +25°C	± 50 ppm max. (see options)
Frequency Stability over the Operating Temp. (Ref to +25°C)	± 50 ppm max. (see Table 1); ± 100 ppm / -10 °C to + 60° C for Fundamental BT
Equivalent Series Resistance	See Table 1
Shunt Capacitance C <sub>0</sub>	7pF max.
Load Capacitance C <sub>L</sub>	18pF (see options)
Drive Level	500µW max., 100µW typical
Aging at 25°C First Year	± 5ppm max.
Insulation Resistance	500Mohms min at 100Vdc ± 15V

TABLE 1

Frequency (MHz)	Custom ESR (ohms)
8.000 - 11.999(Fund)	70
12.000 - 19.999(Fund)	50
20.000 - 33.000(Fund)	40
33.01 - 125.00(3rd O/T)	80

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

**ABMM1 - Frequency -  - R -  -  -  -  -  -**

Frequency
XX.XXXX MHz

Load Capacitance
Please specify CL in pF or S for Series

Custom ESR
RXXX (Value in Ω). If it is custom

Operating Temp.	
E	0°C ~ +70°C
B	-20°C ~ +70°C
C	-30°C ~ +70°C
N	-30°C ~ +85°C
D	-40°C ~ +85°C

Freq. Tolerance	
1	± 10 ppm max.
7	± 15 ppm max.
2	± 20 ppm max.
3	± 25 ppm max.
4	± 30 ppm max.

Packaging	
Blank	Bulk
T	Tape & Reel

Mode
F for Fund. AT>=33MHz
FB for Fund BT*

(\* Note: ±100ppm max stability from -10°C to +60°C only.

Freq. Stability	
U**	± 10 ppm max.
G***	± 15 ppm max.
X	± 20 ppm max.
W	± 25 ppm max.
Y	± 30 ppm max.
H	± 35 ppm max.

\*\* -10°C TO 60°C only

\*\*\* Temp option E and B only

ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



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CORPORATION**

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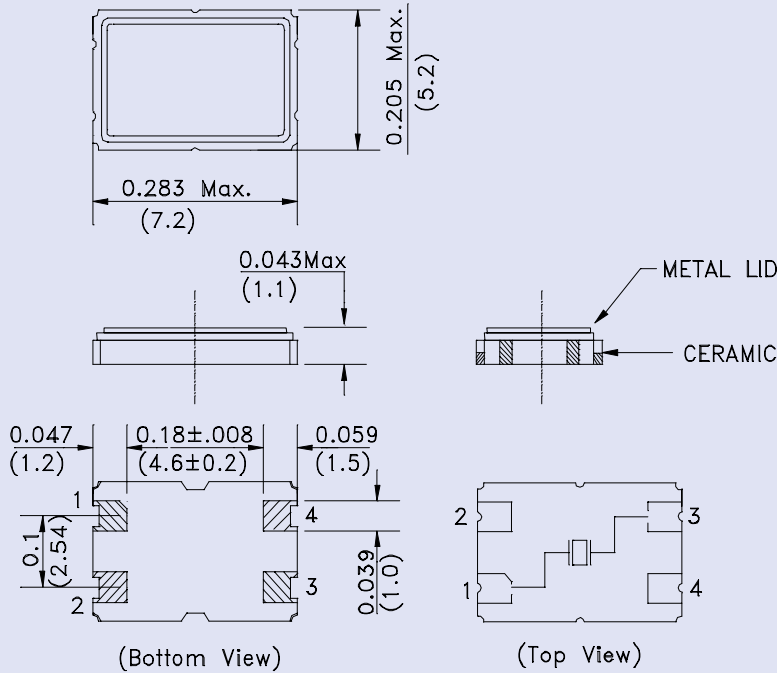


RoHS  
Compliant

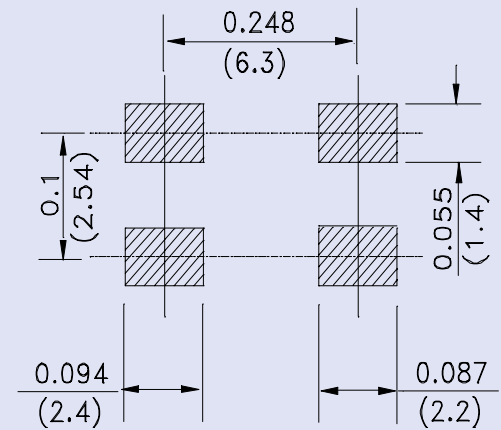


7.2 x 5.2 x 1.1 mm

## OUTLINE DRAWING:



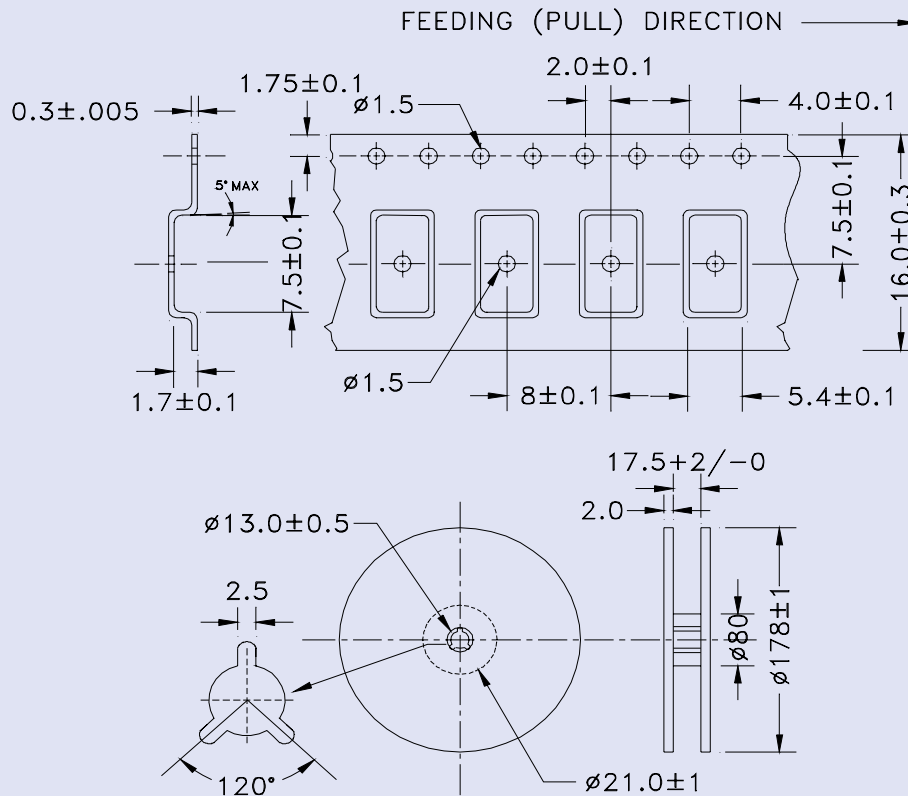
## Recommended Land Pattern



Pads 2 and 4 are connected to metal lid.

Dimensions: Inches (mm)

## TAPE & REEL:



Dimensions: (mm)