

CERAMIC SURFACE MOUNT LOW PROFILE MICROPROCESSOR CRYSTAL

ABMM1



RoHS
Compliant



7.2 x 5.2 x 1.1 mm

FEATURES:

- Suitable for RoHS reflow profile
- Low height 1.1mm
- Ideal for thin equipment
- AT cut offers a tight tolerance and stability ± 50 ppm

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ABMM1 Series
Frequency Range	6.0 MHz to 125 MHz
Operation Mode	AT-cut 6.0 MHz ~ 33.0 MHz (Fundamental: Standard) 33.01 MHz ~ 125 MHz (Third-Overtone: Standard) 33.01 MHz ~ 50.0 MHz (Fundamental: See options)
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 options)
Equivalent Series Resistance	See Table 1
Shunt Capacitance C_0	7pF max.
Load Capacitance C_L	18pF (see options)
Drive Level	500 μ W max., 100 μ W typical
Aging at 25°C First Year	± 5 ppm max.
Insulation Resistance	500Mohms min at 100Vdc ± 15 V

TABLE 1

Frequency (MHz)	ESR (Ω) max.	Frequency (MHz)	ESR (Ω) max.
6.000 - 11.999(Fund)	70	20.000 - 50.000(Fund)	40
12.000 - 20.000(Fund)	50	33.000 - 125.00(3rd O/T)	80

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABMM1 - Frequency - - R - - - -

Frequency in MHz
e.g. 14.31818 MHz
26.000 MHz

Load Capacitance
Please specify CL in pF or
S for Series (8 to 33pF)

Consult with ABRACON for
CL value under 8pF.

ESR if other than STD
RXXX (Value in Ω).
If it is custom

** -10°C TO 60°C only

*** Temp option E, B and -10 to +60°C only

**** Freq. stability ± 50 ppm and ± 100 ppm only.

Contact ABRACON for tighter freq. stability.

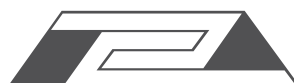
Operating Temp.	
E	0°C ~ +70°C
B	-20°C ~ +70°C
C	-30°C ~ +70°C
N	-30°C ~ +85°C
D	-40°C ~ +85°C
J****	-40°C to +105°C
K****	-40°C to +125°C

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 ≥ 33 MHz

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.



CERAMIC SURFACE MOUNT LOW PROFILE MICROPROCESSOR CRYSTAL

ABMM1

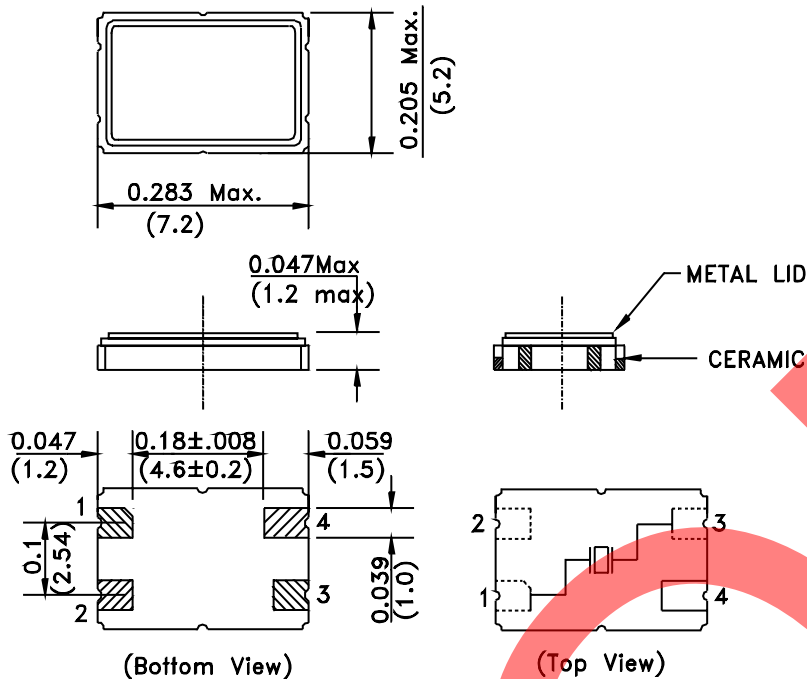


RoHS
Compliant

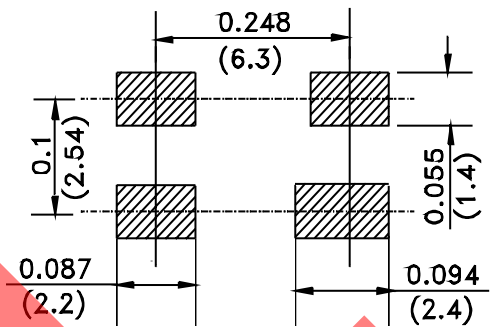


7.2 x 5.2 x 1.1 mm

OUTLINE DRAWING:



Recommended Land Pattern

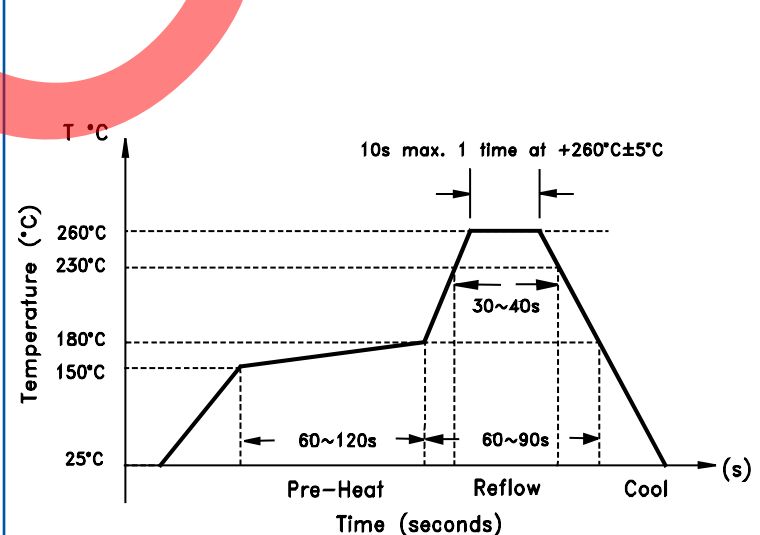
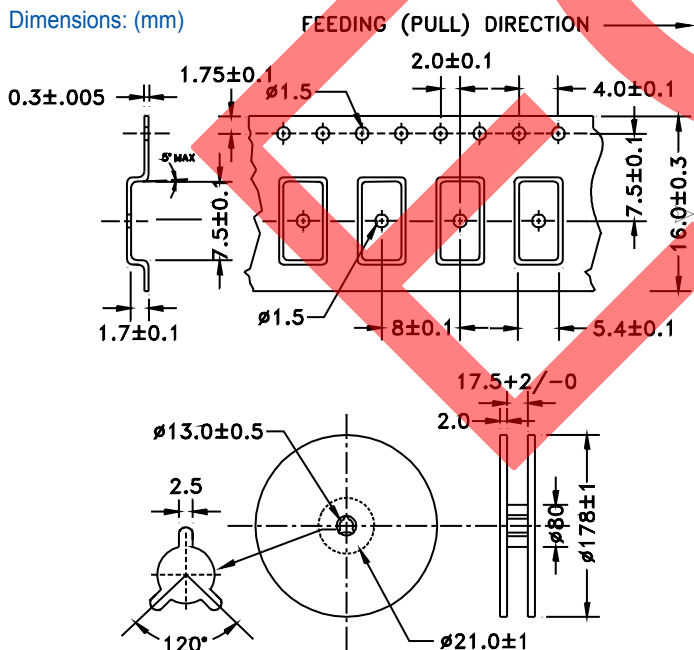


Pads 2 and 4 are connected to metal lid.

Dimensions: Inches (mm)

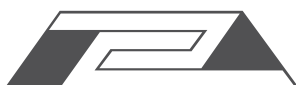
TAPE & REEL: Tape and reel (1,000pcs/reel)

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



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 07.08.10**

30332 Esperanza, Rancho Santa Margarita, California 92688

tel 949-546-8000 | fax 949-546-8001 | www.abracon.com