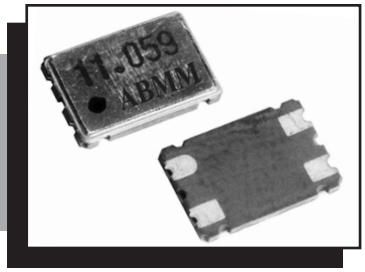
MICROPROCESSOR CRYSTALS

CERAMIC SURFACE MOUNT MICRO MINIATURE

ABMM and ABMM1

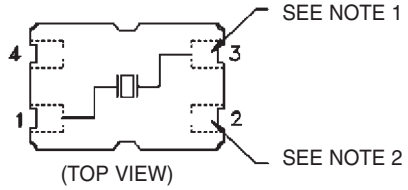


FEATURES:

- Low in height; (1.1mm) suitable for thin equipment.
- AT Strip Cut offering a tight tolerance and stability.
- Ceramic package assures high reliability.
- Suitable for solder reflow.
- Ceramic Lid Option (-K) See Note.

APPLICATIONS:

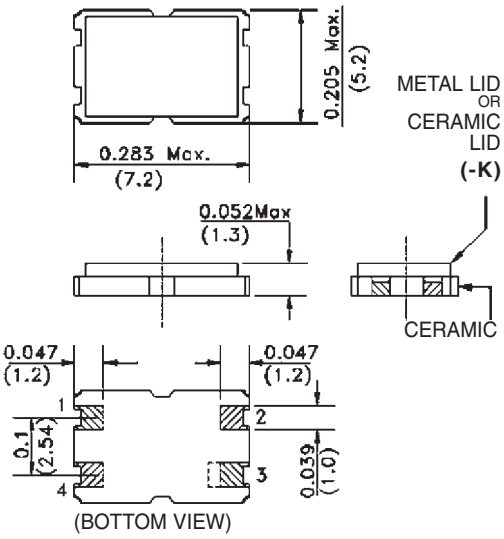
- PCMCIA applications.
- Suitable for thin equipment.



(TOP VIEW)

NOTE 1:
A longer pad 3 (1.6mm) may appear on bottom pattern.

NOTE 2:
A cut of 0.3mm may appear on pad 2 of bottom pattern. Pad 2 and 4 are connected to metal lid.

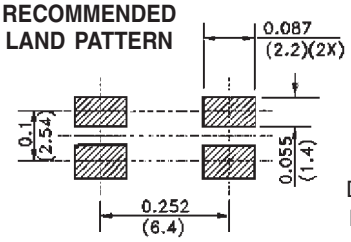


STANDARD SPECIFICATIONS

Frequency Range	**8.000 MHz - 90 MHz**
Operation Mode	8.0 MHz ~ 32 MHz (Fundamental) 28 MHz ~ 90 MHz (3rd overtone)
Operating Temperature	-10°C to + 60°C *(See Options)*
Storage Temperature	-40°C to + 85°C
Frequency Tolerance @ 25°C	± 50 ppm max. *(See Options)*
Frequency Stability over Temp.	± 50 ppm max. *(See Options)* ±100 ppm max. @ -10°C to + 60°C (FB)
Equivalent Series Resistance (ESR) Fundamental	60 Ω max. for F ~ 8.0 MHz to 15.999 MHz 50 Ω max. for F ~ 16 MHz to 32.000 MHz
3rd Overtone	100 Ω max. for F ~ 28 MHz to 90.000 MHz
Shunt Capacitance C_0	7 pF max.
Load Capacitance C_L	18 pF *(See Options)*
Drive Level	500 μW max, 100 μW correlation
Aging @ 25°C per Year	± 5 ppm max.
Insulation Resistance:	500 M Ω min. at 100 Vdc ±15 V

Please see environmental, and mechanical specifications on page 68, Group 2.
Marking, see page 76. Tape and Reel, see pages 74-75 (1,000 pcs/reel).

RECOMMENDED LAND PATTERN



Dimensions: Inches (mm)

ORDERING OPTIONS

ABMMX - Frequency - CL - ESR - Temperature - Tolerance - Stability - Lid Material - Mode - Packaging

- Frequency: Blank or 1; XX.XXXX MHz
- CL: Load cap.in pF or -S for Series
- ESR: RXXX (value in Ω)
- Temperature:
  - -E for 0°C to + 70°C
  - -B for -20°C to + 70°C
  - -C for -30°C to + 70°C
  - -N for -30°C to + 85°C
  - -D for -40°C to + 85°C
- Tolerance:
  - -1 for ± 10 ppm
  - -2 for ± 20 ppm
  - -3 for ± 25 ppm
  - -4 for ± 30 ppm
- Stability:
  - -X for ± 20 ppm max.
  - -W for ± 25 ppm max.
  - -Y for ± 30 ppm max.
  - -H for ± 35 ppm max.
- Lid Material: - K (Ceramic Lid)
- Mode:
  - -F (for Fundamental AT ≥ 28 MHz)
  - - FB (Fundamental BT)*
- Packaging: - T (Tape & Reel)

PACKAGE	H MAX.
ABMM1	0.043 (1.1)

(*) ± 100 ppm max. stability from -10°C. to 60°C only.

Contact us for tighter tolerance and stability.
Certain restrictions apply on selected frequencies and frequency stabilities.

ABRACON IS ISO 9001 / QS 9000 CERTIFIED

NOTE: Left blank if standard • All specifications and markings subject to change without notice

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