

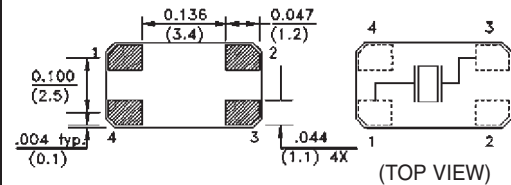
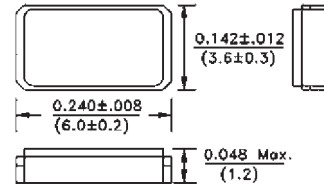
HIGH PRECISION CRYSTALS SURFACE MOUNT CERAMIC LOW PROFILE ABMM2

FEATURES:

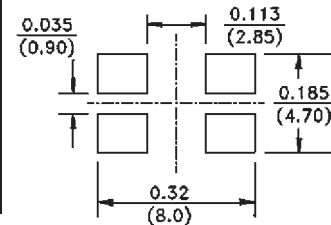
- Low in height (1.2mm).
- Tight tolerance and stability available.
- Seam welded ceramic package.
- Suitable for solder reflow.
- Wide frequency range.
- High precision crystal.

APPLICATIONS:

- PCMCIA applications.
- Suitable for thin equipment.



RECOMMENDED LAND PATTERN



Dimensions: Inches (mm)

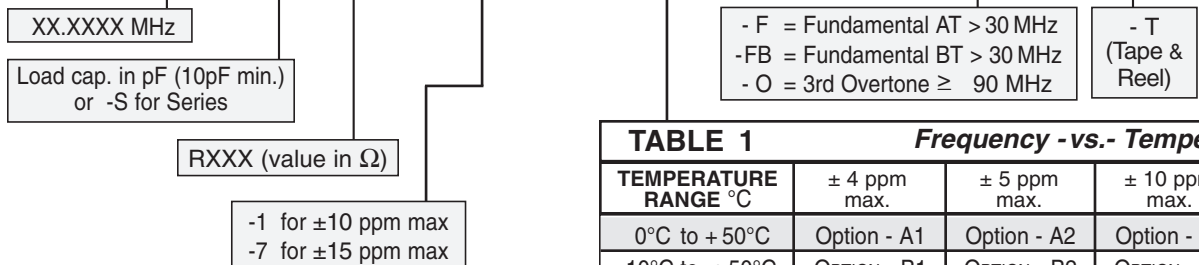
STANDARD SPECIFICATIONS

Frequency Range	12.800 MHz - 110 MHz	
Operation Mode	12.800 MHz ~ 30 MHz	(Fundamental)
	30.01 MHz ~ 100 MHz	(3rd overtone)
	90.00 MHz ~ 110 MHz	(5th overtone)
Operating Temperature	-10°C to + 60° C (See Options)	
Storage Temperature	-40°C to + 85° C	
Frequency Tolerance @ 25°C	± 20 ppm max. (See Options)	
Frequency Stability over Temp.	± 20 ppm max. (See TABLE 1 - below)	
Equivalent Series Resistance (ESR)	Fundamental	50 Ω max. for F ~ 12.8 MHz to 30.0 MHz
	3rd overtone	60 Ω max. for F ~ 30 MHz to 100.00 MHz
	5th overtone	80 Ω max. for F ~ 90.0 MHz to 110.0 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	± 2 ppm max.	
Insulation Resistance	500 MΩ min. at 100 Vdc ±15V	

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).

ORDERING OPTIONS

ABMM2 - Frequency - CL - ESR - Tolerance - Temperature and Stability - Mode - Packaging



TEMPERATURE RANGE °C	± 4 ppm max.	± 5 ppm max.	± 10 ppm max.	± 20 ppm max.
0°C to +50°C	Option - A1	Option - A2	Option - A3	Option - A4
-10°C to +50°C	OPTION - B1	OPTION - B2	OPTION - B3	OPTION - B4
-10°C to +60°C		OPTION - C2	Option - C1	Standard
-20°C to +70°C			OPTION - E1	OPTION - E2
-40°C to +85°C				Option - D1

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