LOW PROFILE CERAMIC SURFACE MOUNT **QUARTZ CRYSTALS**



6.0 X 3.6 X 1.2mm

ABMM2

FEATURES:

- Low in height (1.2 mm max.)
- Tight tolerance and stability available
- Seam welded ceramic package
- Suitable for solder reflow
- > APPLICATIONS:
 - PCMCIA Applications
 - Thin equipment

> STANDARD SPECIFICATIONS:

PARAMETERS	
Frequency Range	8.00 MHz - 110.00 MHz
Operation Mode	
Fundamental	8.0 MHz - 50.0 MHz
Third-Overtone	30.01 MHz - 100.0 MHz
Fifth-Overtone	F ~ 90.00 MHz - 110 MHz
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)
	± 100 ppm @ -10 °C to + 60° C for Fundamental BT
Equivalent Series Resistance	See Table 1
Shunt Capacitance C ₀	7pF max.
Load Capacitance C _L	18pF (see options)
Drive Level	500μW max., 100μW correlation
Aging at 25°C First Year	± 2ppm max.
Insulation Resistance	500MΩ min. @ 100Vdc ± 15V

TUH : Frequency for F <99.9999MHz T= First " ten " digit of frequency

999 for 99.9 MHz

A1 for ± 4 ppm max. @ 0°C to +50°C

A2 for ± 5 ppm max. @ 0°C to +50°C

A3 for ± 10 ppm max. @ 0°C to +50°C

A4 for ± 20 ppm max. @ 0°C to +50°C

B1 for ± 4 ppm max. @ -10°C to +50°C

B2 for ± 5 ppm max. @ -10°C to +50°C

B3 for ± 10 ppm max. @ -10°C to +50°C

B4 for ± 20 ppm max. @ -10°C to +50°C

C2 for ± 5 ppm max. @ -10°C to +60°C

C1 for ± 10 ppm max. @ -10°C to +60°C

E1 for ± 10 ppm max. @ -20°C to +70°C

E2 for ± 20 ppm max. @ -20°C to +70°C D1 for ± 20 ppm max. @ -40°C to +85°C

U = First " unit " of frequency

Example: 128 for 12.8 MHz

H = First " tenth " of frequency

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Frequency (MHz)	ESR (Ω)
8.0 - 10.0 (Fund)	72
10.0 - 50.0 (Fund)	50
30 - 100 (3rd OT)	60
90 - 110 (5th O/T)	80

MARKING:

TUH or XXX.X (See note) AMM2 ZY (See note)

XXX.X for F >=100MHz Ex: 110.0 for 110MHz ZY: Date Code, Z = Month (A to L), Y = Year (0 for 2000)

> OPTIONS AND PART IDENTIFICATION (Left blank if standard):

ABMM2 - Freq - CL - ESR - Temp. - Tolerance - Temp & Stability - Mode - Packaging CL option: Temp. & Frequency stability options:

Please enter load cap. in pF or S for Series

Frequency tolerance options: 1 for ± 10 ppm max.

7 for ± 15 ppm max.

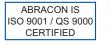
Operating mode options:

F for Fundamental AT for F >30 MHz FB for Fundamental BT for F >30 MHz O for 3rd Overtone for F >= 90 MHz

Packaging option: T for Tape and Reel

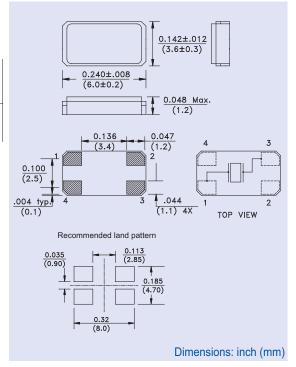
(1000 pcs/reeel)

ESR Options: RXXX (Value in Ω max.)



CORPORATION

> OUTLINE DRAWING:



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