

CERAMIC SMD ULTRA MINIATURE QUARTZ CRYSTAL



2.0 X 1.6 X 0.45mm

ABM11

* RoHS COMPLIANT

➤ **FEATURES:**

- RoHS compliant
- Suitable for reflow
- Tight stability available
- Ceramic package seam welded sealing assures high precision and reliability.

➤ **APPLICATIONS:**

- Blue-tooth, Wireless applications
- Computers, Modems, Microprocessors
- Communication, Test equipment
- High density applications
- PCMCIA

➤ **STANDARD SPECIFICATIONS:**

PARAMETERS	
Frequency Range	20.000 MHz - 80.000 MHz*
Operation Mode	Fundamental
Operating Temperature	- 10°C to + 60°C (see options)
Storage Temperature	- 40°C to + 85°C
Frequency Tolerance @ 25°C	± 30 ppm max. (see options)
Frequency Stability	± 50 ppm max. (see options)
Equivalent Series Resistance	See table 1
Shunt Capacitance C0	7 pF max.
Load Capacitance CL	10 pF (see options)
Drive Level	200 µW max., 10 µW correlation
Aging (First Year) @ 25°C ± 3°C	± 5ppm max.
Insulation Resistance	500 MΩ min at 100Vdc ± 15 Vdc

TABLE 1

FREQ (MHz)	ESR (Ω)max.
20.0 - 25.0	200
25.0 - 40.0	100
40.0 - 80.0	60

Developed Frequency List

18.000000	26.000000
20.000000	27.000000
22.000000	27.003800
24.545450	28.636363

*please refer to list of developed frequencies, contact factory for additional frequencies

➤ **MARKING:**

- XX.X (Frequency)
- A ZYX (ZY: date code, e.g. L2; Z: month A to L; Y: last digit of year; X: Traceability code)

➤ **OPTIONS AND PART IDENTIFICATION (Left blank if standard)*:**

ABM11 - Frequency - CL - ESR - Temperature - Tolerance - Stability - Packaging

Load Capacitance option:

Please specify **CL** in pF or **S** for Series (min 10 pF)

Temperature options:

B for -20°C to +70°C
D for -40°C to +85°C

Freq Stability options:

U for ± 10 ppm
G for ± 15 ppm
X for ± 20 ppm
Y for ± 30 ppm
Z for ± 100 ppm

ESR option:

RXXX (value in ohms)

Freq Tolerance options:

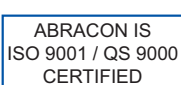
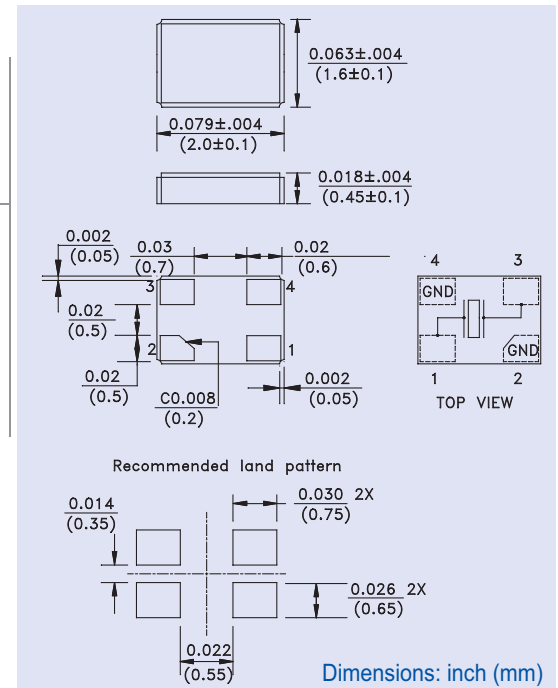
7 for ± 15 ppm
2 for ± 20 ppm
5 for ± 50 ppm

Packaging option:

T for Tape and Reel
(1,000pcs/reel)

*not all combinations/configurations are available, please contact factory for availability.

➤ **OUTLINE DRAWING:**



rev1.1-2/05

