CERAMIC SMD ULTRA MINIATURE QUARTZ CRYSTAL





2.0 x 1.6 x 0.59 mm

ABM11

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- FEATURES:
 2.0 x 1.6 x 0.9mm ultra miniature package.
 - IR reflow capable.
 - Seam sealed ceramic package with metal lid assures high precision and reliability.

> APPLICATIONS:

- Cellular telephones, Pagers.
- Communication and Test equipment.
- \bullet High Density application_{S.}
- PCMCIA and wireless applications.

▷ STANDARD SPECIFICATIONS:

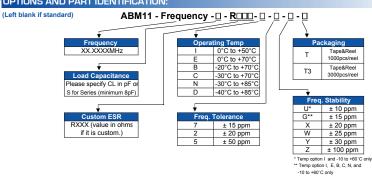
PARAMETERS	
ABRACON P/N	ABM11 Series
Frequency Range	20.000 MHz to 50.000 MHz
Operation Mode	Fundamental
Operating Temperature	-10°C to +60°C (see options)
Storage Temperature	-40°C to +85°C
Frequency Tolerance*	± 30 ppm max. (see options)
Frequency Stability over the Operating Temperature (Ref to + 25°C)	L FO nom may (occ options)
Equivalent Series Resistance	± 50 ppm max. (see options) See table 1
Shunt Capacitance C0	7 pF max.
Load Capacitance CL	10 pF (see options)
Drive Level	100 μW max., 10 μW typical
Aging @ 25° C per year:	± 5ppm max.
Insulation Resistance	$500~\text{M}\Omega$ min at $100\text{Vdc} \pm 15~\text{Vdc}$

TABLE 1- Standard ESR

Frequency (MHz)	ESR(Ω) max
20.000 - 23.999	120
24.000 - 29.999	100
30.000 - 37.999	80
38.000 - 50.000	60

(Note)*: Tolerance and Temp stability do not include Mechanical, Environmental, and Aging frequency shift.

○ OPTIONS AND PART IDENTIFICATION:







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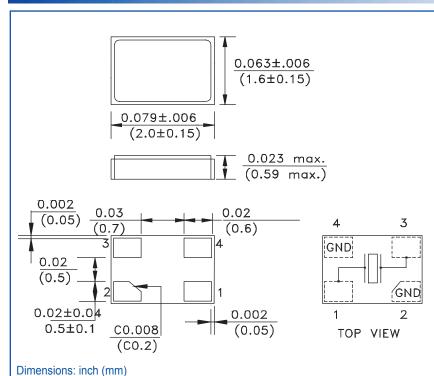


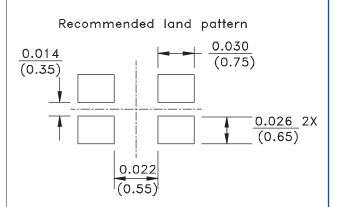


2.0 x 1.6 x 0.59 mm

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OUTLINE DRAWING:





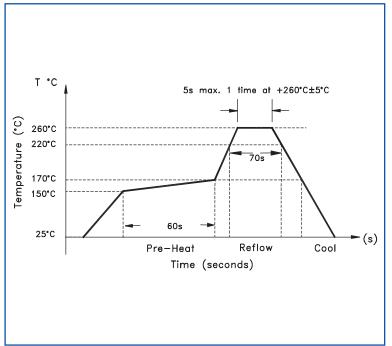
Note: Due to the availability of raw materials, this part may be manufactured with the chamfer on pin 1 or 4. Be advised that this does not affect he electrical characteristics of the crystal in any way.

> TAPE & REEL:

T: 1000pcs/reel

T3: 3000pcs/reel FEEDING (PULL) DIRECTION 1.75±0.1 0.3±.05 0.3±.05 0.65±0.1 9.0±1.0 9.0±1.0 4.0±0.1 9.0±1.0

REFLOW PROFILE:





Need a test socket for the ABM11 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, **click here. P/N AXS-2016-04-04C**

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ABRACON IS ISO 9001 / QS 9000 CERTIFIED

Dimensions: mm



 $\emptyset 20.2 \pm 1$

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 2.2 ± 0.5