MINIATURE CERAMIC SMD CRYSTAL

ABM9



4.0 x 2.5 x 0.7mm

Pb RoHS Compliant

FEATURES:

- Low in height; suitable for thin equipment.
- Ceramic package and metal lid assures high reliability.
- Tight tolerance and stability available.
- Suitable for solder reflow.
- High precision crystal, fundamental mode.

APPLICATIONS:

- High density applications.
- Modems, communication and test equipment.
- PMCIA, Wireless applications.

STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	ABM9 Series
Frequency Range	12.00 MHz - 32.00 MHz (*)
Operation Mode	Fundamental AT
Operating Temperature	-10°C to + 60°C (see options)
Storage Temperature	- 40°C to + 105°C
Frequency Tolerance	± 50 ppm max. (see options)
Frequency Stability over the Operating Temp. (Ref to +25°C)	± 50 ppm max. (see options)
Equivalent Series Resistance	See Table 1
Shunt Capacitance C_0	7pF max.
Load Capacitance C_L	18pF (see options)
Drive Level	100µW max., 10µ W typical
Aging at 25°C Per Year	± 5ppm max.
Insulation Resistance	500MΩ min with 100 Vdc ± 15 Vdc

TABLE 1 - Standard ESR

FREQ (MHz)	ESR (Ω)max.
12.000 - 23.999	80
24.000 - 32.000	60

(*) Frequencies above 32MHz based on availability. Please contact ABRACON for further details.

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABM9 - Frequency - □ - R□□□ - □ - □ - □ - □

Frequency
XX.XXXXMHz

Load Capacitance
Please specify CL in pF or S for Series

ESR
RXXX (value in Ω if it is custom.)

Operating Temp.	
E	0°C to +70°C
B	-20°C to +70°C
C	-30°C to +70°C
N	-30°C to +85°C
D	-40°C to +85°C

Freq. Tolerance	
1	± 10 ppm
7	± 15 ppm
2	± 20 ppm
3	± 25 ppm
4	± 30 ppm

Packaging	
Blank	Bulk
T	Tape and Reel

Freq. Stability	
U	± 10 ppm(*)
G	± 15 ppm(*)
X	± 20 ppm
W	± 25 ppm
Y	± 30 ppm
H	± 35 ppm
Z	± 100 ppm(#)

(*) -10 C to +60 C only

(#) For extended temperatures.

*Contact ABRACON for tighter freq. stability.

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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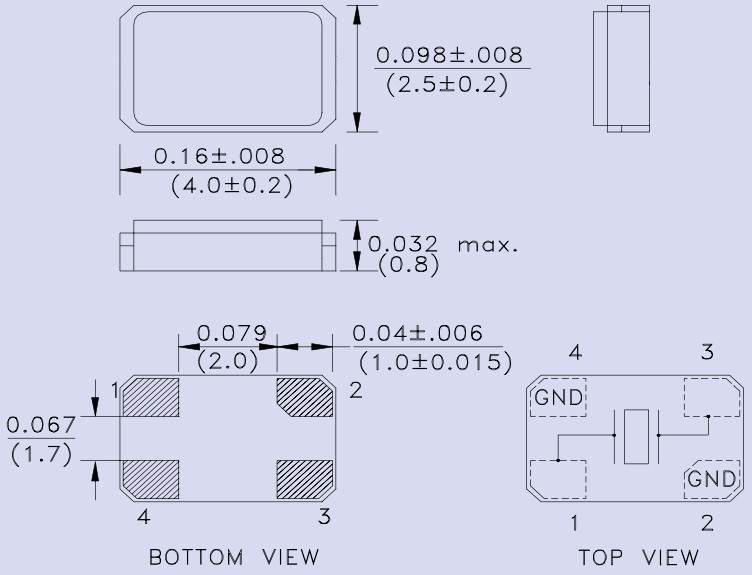
ABM9

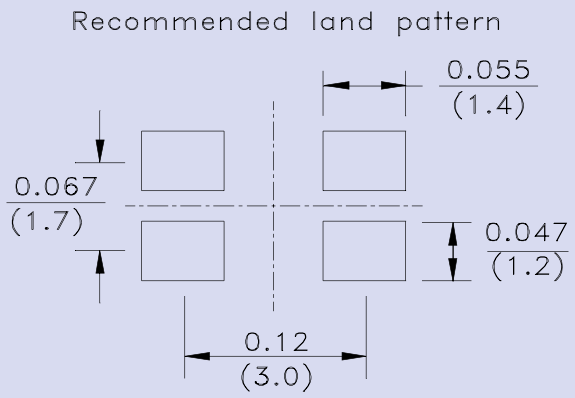


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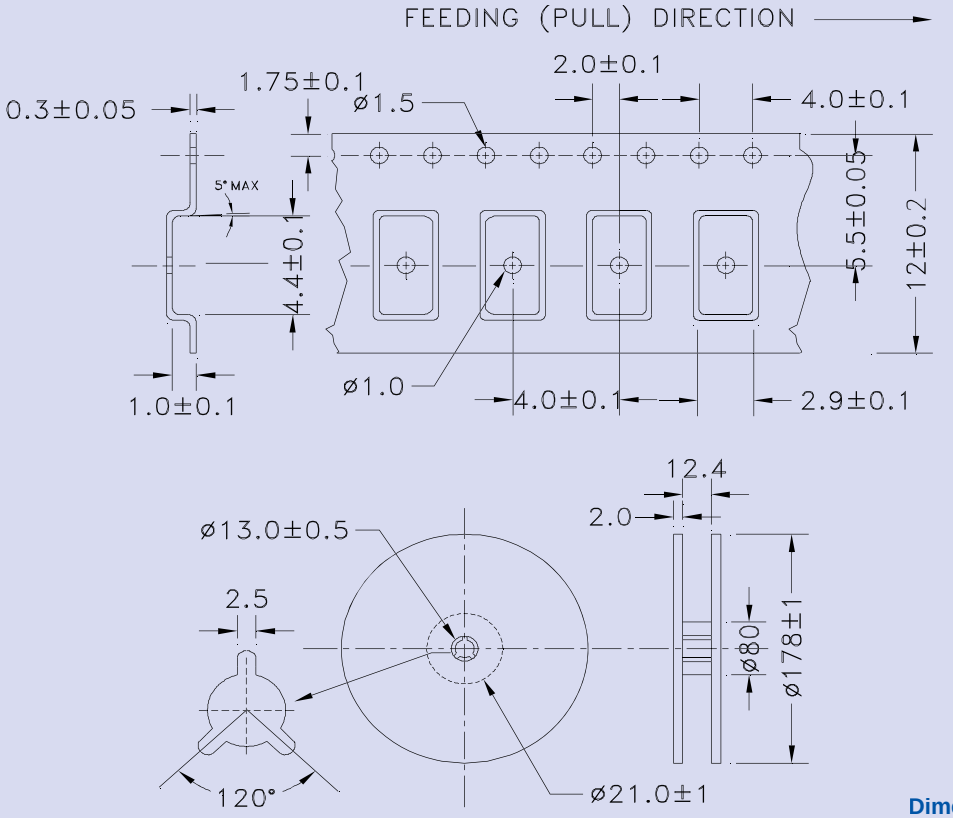
OUTLINE DRAWING:





Dimensions: mm

TAPE & REEL: Tape and reel (1,000pcs or 3,000pcs/reel)



Dimensions: mm

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