



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MINIATURE CERAMIC SMD CRYSTAL



4.0 x 2.5 x 0.8mm

ABM9



RoHS
Compliant

FEATURES:

- Low in height; suitable for thin equipment.
- Available +/-10ppm stability -10 ~ +60°C
- Tight tolerance and stability available.
- Suitable for RoHS compliant reflow

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	12.000	-----	32.000*	MHz	*Contact Abracon for availability of F>32MHz
Operation Mode	Fundamental, AT			-----	
Operating Temperature	-10	-----	+60	°C	See options
Storage Temperature	-40	-----	+105	°C	
Frequency Tolerance @+25°C	-50	-----	+50	ppm	See options
Frequency Stability over the Operating Temperature (ref. to +25°C)	-50	-----	+50	ppm	See options
Equivalent series resistance (R1)	See table 1 below			Ω	
Shunt capacitance (C0)	-----	-----	7.0	pF	
Load capacitance (CL)	-----	18.0	-----	pF	See options
Drive Level	-----	10	100	μW	
Aging	-5	-----	+5	ppm	@25°C±3°C, First year
Insulation Resistance	500	-----	-----	MΩ	@ 100Vdc ± 15V

TABLE 1- Standard ESR

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

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABM9 - [] MHz - [] - [] - [] [] [] - []

Frequency in MHz
Please specify the frequency in MHz.
e.g. 16.000MHz

Load Capacitance (pF)
Please specify CL in pF or S for series

Custom ESR if other than standard
R []
□: Specify a value in Ω (e.g.: R40)

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

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

Packaging
Blank: Bulk
T: Tape & 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.

ABRACON IS
ISO 9001: 2008
CERTIFIED



**ABRACON
CORPORATION**

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Revised: 04.07.11

MINIATURE CERAMIC SMD CRYSTAL

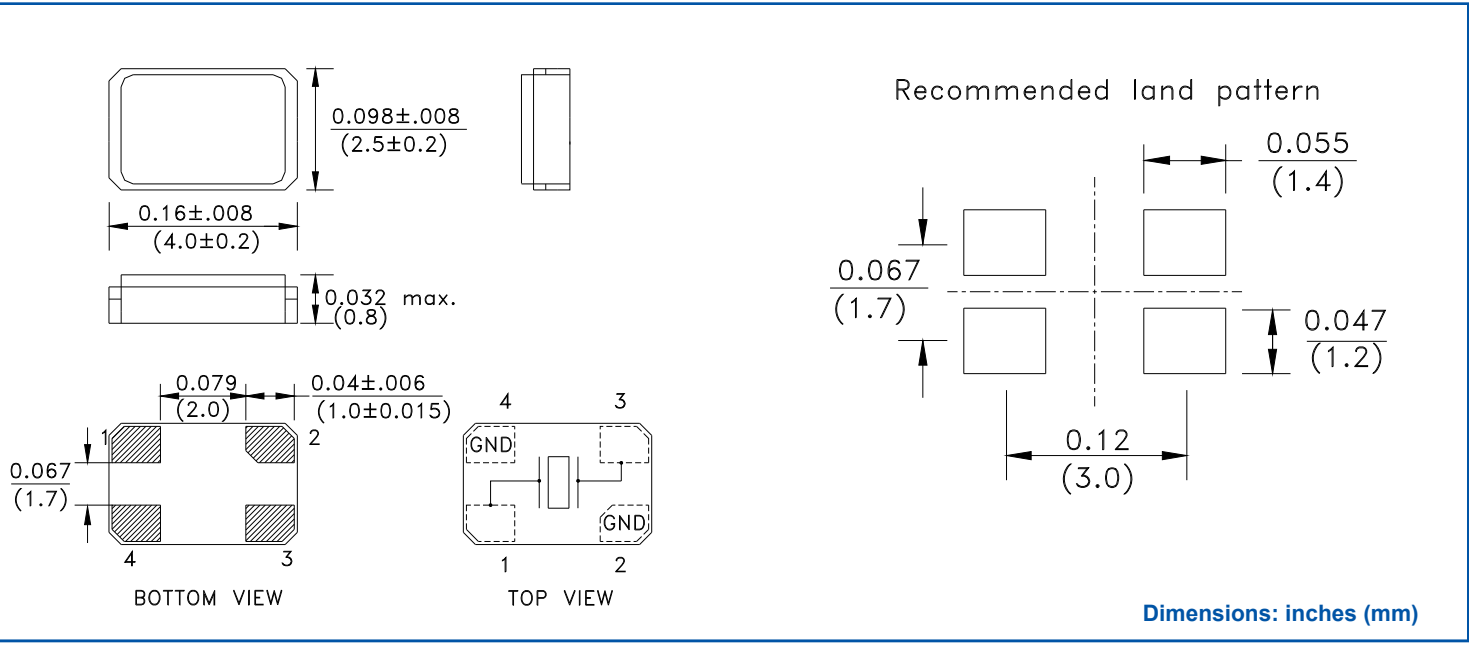


4.0 x 2.5 x 0.8mm

ABM9

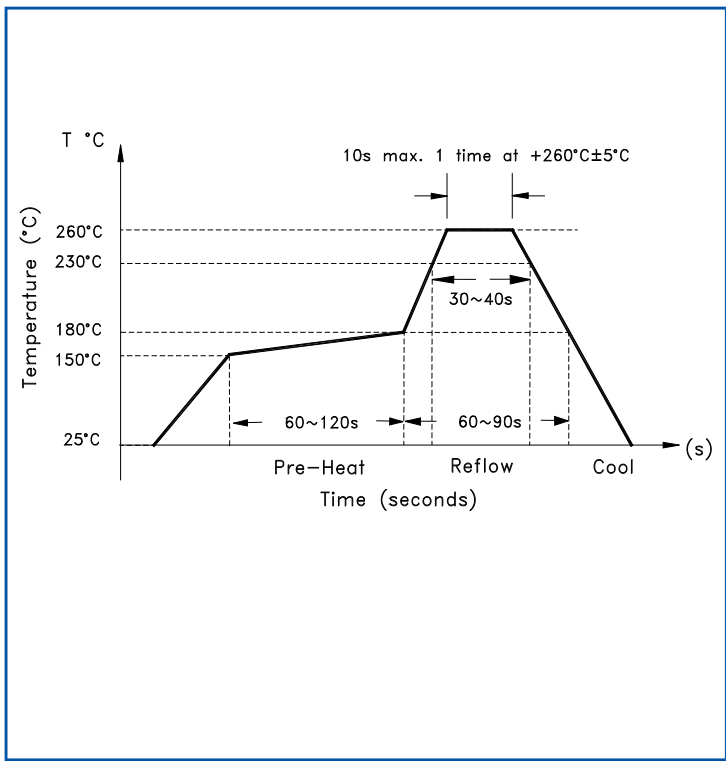
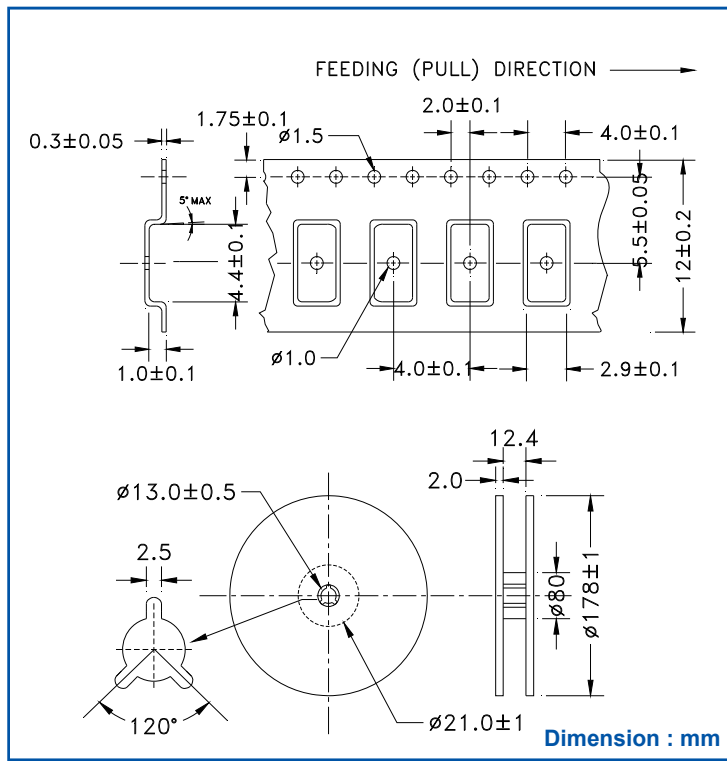
Pb | **RoHS**
Compliant

OUTLINE DRAWING:



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

REFLOW PROFILE:



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