ULTRA MINIATURE CERAMIC SMD CRYSTAL

ABM13



1.2 x 1.0 x 0.28mm

RoHS/RoHS II compliant

Moisture Sensitivity Level (MSL)
– This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable

FEATURES:

- Suitable for RoHS reflow profile
- Available tight tolerance and stability
- Electron beam sealed ceramic package assures high precision and reliability
- Smallest package size in industry1.2x1.0x0.28mm

APPLICATIONS:

- Mobile phone, W-LAN, Bluetooth, Tuner Module
- Computers, Modems, Microprocessors
- Communication, Test equipment
- High density applications
- PCMCIA
- Portable radios and MP3 players

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	36.000		80.000	MHz	
Standard Frequency	37.400MHZ, 38.000MHZ, 40.000MHZ, 48.000MHZ, 52.000MHZ, 58.400MHZ, 64.000MHZ and 80.000MHZ			MHz	
Operation Mode	Fundamental				
Operating Temperature	0		+50	ºC	See options
Storage Temperature	-40		+85	ºC	
Frequency Tolerance @+25ºC	-50		+50	ppm	See options
Frequency Stability over the Operating Temperature (ref. to +25ºC)	-50		+50	ppm	See options
Equivalent Series Resistance			200	Ω	
Load capacitance (CL)		7		pF	Standard (See options if other than STD)
Drive Level		10	100	µW	

2 Faraday, Suite# B | Irvine | CA 92618 **Revised: 07.09.15**
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OPTIONS & PART IDENTIFICATION: (Left blank if standard)

ABM13 - [ ] MHz - [ ] - R [ ] - [ ][ ][ ] - [ ]

Frequency in MHz
Please specify the frequency in MHz.
e.g. 40.000MHz

Load Capacitance

Blank: 7pF
5: 5pF
6: 6pF

Contact Abracon for other values

Packaging

Blank: Bulk
T: 3000pcs/Reel
T5: 5000pcs/Reel

Freq. Stability

Blank: ± 50 ppm
U: ± 10 ppm
G: ± 15 ppm
X: ± 20 ppm
Y: ± 30 ppm

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

Operating Temp. (See Table 1 for details)

Blank: 0°C ~ +50°C
A: -10°C ~ +60°C
B: -20°C ~ +70°C
D: -40°C ~ +85°C

Freq. Tolerance (See Table 1 for details)

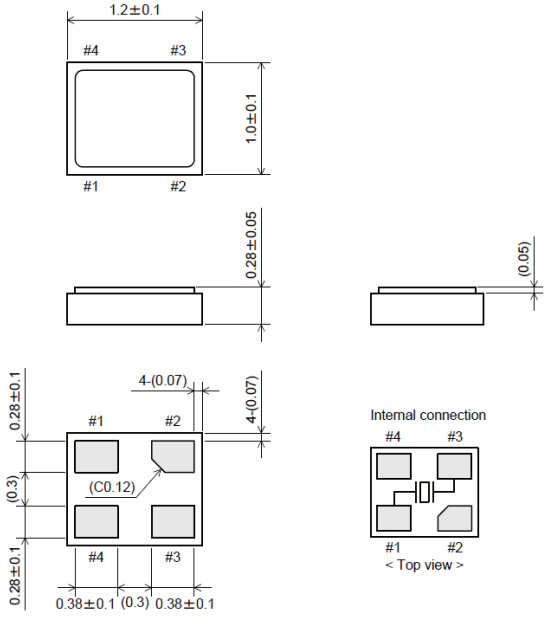
Blank: ± 50 ppm
1: ± 10 ppm
2: ± 20 ppm
4: ± 30 ppm

Note: See Table 1 for the availability of Operating Temp. and Freq. Stability combinations.

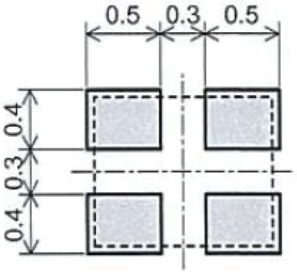
Table 1 Available Combinations of Operating Temp. and Freq. Stability

Operating Temp.	Freq. Stability				
	U:±10ppm	G:±15ppm	X:±20ppm	Y:±30ppm	Std:±50ppm
Std: 0°C ~ +50°C	√	√	√	√	√
A: -10°C ~ +60°C		√	√	√	√
B: -20°C ~ +70°C			√	√	√
D: -40°C ~ +85°C				√	√

OUTLINE DRAWING:



Recommended Land Pattern



Note:
Pin 2 is connected to the metal lid.
(Please connect to GND)
Pin 4: No connection

Dimensions: mm

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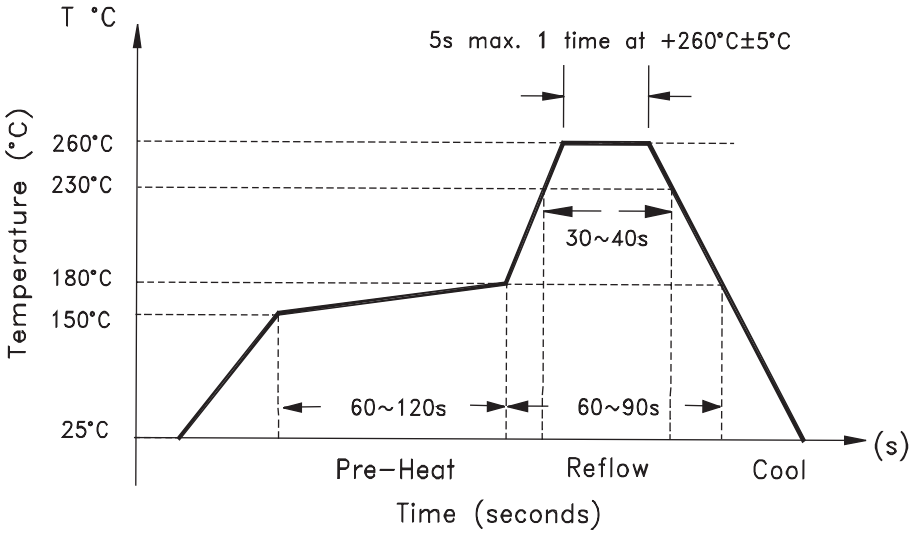
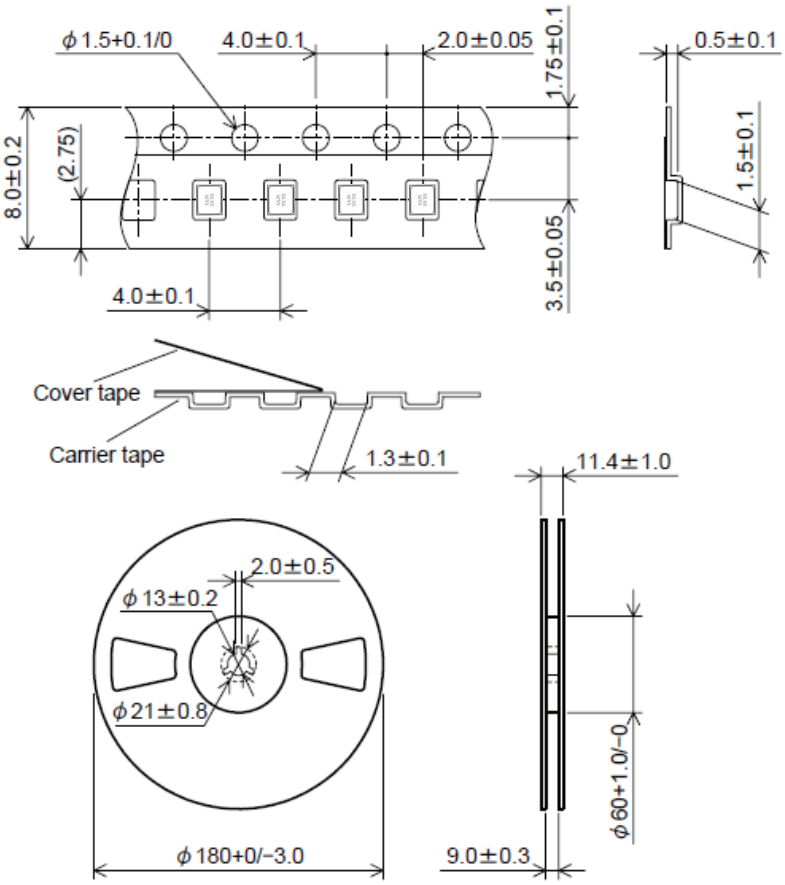
REFLOW PROFILE:



TAPE & REEL:

T: 3000pcs/reel
T5: 5000pcs/reel



Dimensions: mm



Need a test socket for the ABM12 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, **click here. P/N AXS-1612-04-01C**

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