

ULTRA MINIATURE CERAMIC SMD CRYSTAL



ABM8

3.2 x 2.5 x 0.8mm

ABM8

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



RoHS
Compliant

FEATURES:

- Low in height; suitable for thin equipment, 0.8mm max
- Seam sealed package assures high reliability
- Tight tolerance and stability available
- Suitable for RoHS reflow
- Available for fundamental and 3rd over tone mode

APPLICATIONS:

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

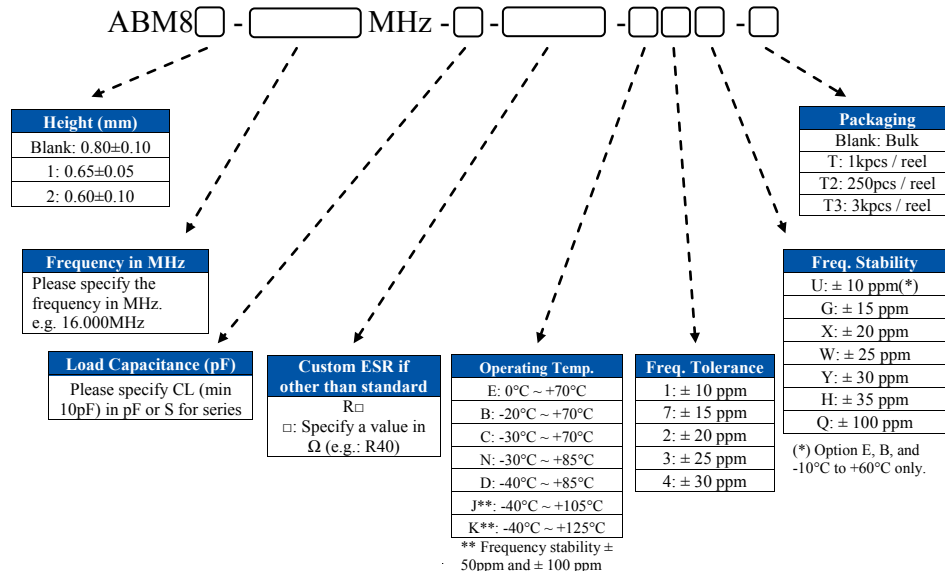
STANDARD SPECIFICATIONS:

| Parameters | Minimum | Typical | Maximum | Units | Notes |
|---|--|---------|----------|-------|--|
| Frequency Range | 10.000 | ----- | 125.000* | MHz | Contact Abracon for available F<11MHz |
| Operation Mode | Fundamental | | | ----- | 10MHz - 54MHz |
| | 3rd Overtone (Standard Frequencies: 64, 66, 66.6666, 75, 80, 98.304, 100, 125MHz) | | | ----- | 64.000 MHz - 125.000 MHz Please contact Abracon for available frequencies |
| Operating Temperature | -10 | ----- | +60 | °C | See options |
| Storage Temperature | -55 | ----- | +125 | °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 | Standard (See options if other than STD) |
| Drive Level | ----- | 10 | 100 | μW | |
| Aging | -3 | ----- | +3 | ppm | @25°C±3°C First year |
| Insulation Resistance | 500 | ----- | ----- | MΩ | @ 100Vdc ± 15V |

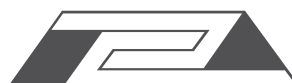
TABLE 1- Standard ESR

| Frequency (MHz) | ESR(Ω) max | Frequency (MHz) | ESR(Ω) max |
|------------------------|------------|---------------------------|------------|
| 10.000 -11.999 (Fund) | 200 | 30.000 - 39.999 (Fund) | 40 |
| 12.000 -15.999 (Fund) | 120 | 40.000 - 54.000 (Fund) | 35 |
| 16.000 -19.999 (Fund) | 70 | 66.000 - 80.000 (3rd OT) | 120 |
| 20.000 - 29.999 (Fund) | 50 | 98.304 - 125.000 (3rd OT) | 80 |

OPTIONS AND PART IDENTIFICATION: (Left blank if standard)



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OUTLINE DRAWING:

0.098±.008 (2.5±0.2)
0.126±.008 (3.2±0.2)
See Table 2

0.047 (1.2) 0.035±.006 (0.9±0.15)
0.04 (1.0)
0.026±.006 (0.65±0.15)

0.033 (0.8) 0.052 (1.3)
0.039 (1.0) (0.041) (1.05)

Table 2

| Height (mm) | |
|-------------|-------------|
| ABM8 | 0.80 max |
| ABM81 | 0.65+/-0.05 |
| ABM82 | 0.60+/-0.10 |

Recommended land pattern

Table 2

| Height (mm) | |
|-------------|-------------|
| ABM8 | 0.80 max |
| ABM81 | 0.65+/-0.05 |
| ABM82 | 0.60+/-0.10 |

Dimensions: inch (mm)

TAPE & REEL:

- Option "-T" : Tape and reel (1,000pcs/reel) : ABM8, ABM82
Tape and reel (3,000pcs/reel) : ABM81
- Option "-T2" : Tape and reel (250pcspcs/reel) : ABM8
- Option "-T3" : Tape and reel (3,000pcs/reel) : ABM8, ABM82 only

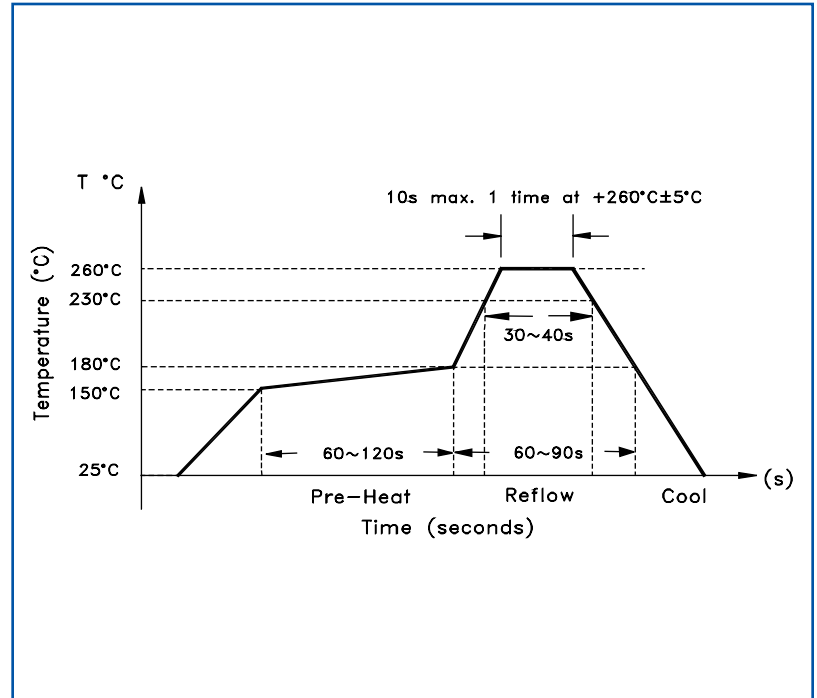
REFLOW PROFILE:

FEEDING (PULL) DIRECTION →

0.3±.05 1.75±0.1 2.0±0.1 4.0±0.1
3.5±0.1 8.0±0.3
1.0±0.1 1.05 4.0±0.1 2.9±0.1

9.0±0.3 2.0 180±1
13.0±0.5 2.5 120° 21.0±1

Dimensions: mm



Need a test socket for the ABM8 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#).

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