

MICROPROCESSOR AT49 4 PADS SMD CRYSTAL

ABSM3A



RoHS
Compliant



12.5 x 4.95 x H

FEATURES:

- Excellent all-purpose surface-mount crystal.
- Four pad land pattern compatible with common plastic molded designs.

APPLICATIONS:

- Home electronics
- Computers, modems, and communications
- Clock applications
- Microprocessors

STANDARD SPECIFICATIONS:

PARAMETERS

| | |
|--------------------------------------|--|
| ABRACON P/N: | ABSM3A Series |
| Frequency: | 3.579545 MHz to 54 MHz |
| Operation mode: | AT-strip (see options) 3.579545 MHz - 30.00 MHz (Fundamental AT) 40.00 MHz - 54.00 MHz (3rd OT AT) 30 MHz - 48.00 MHz (Fundamental BT) |
| Operating temperature: | - 10°C to + 60°C (see options) |
| Storage temperature: | - 40°C to + 85° C |
| Frequency tolerance: | ± 50 ppm max. (see options) |
| Frequency stability over: | ± 100 ppm max. (see options) |
| Equivalent series resistance (max.): | See Table 1 |
| Shunt capacitance C0: | 7.0pF max. |
| Load capacitance CL: | 18.0pF (see option) |
| Drive level: | 100mW max., 100µW correlation |
| Aging (per year) @ 25° C: | ± 5 ppm max. |
| Insulation resistance: | 500 MΩmin. at 100 Vdc ± 15 Vdc |

Table 1 Standard ESR

| Frequency (MHz) | ESR(Ω) max. |
|-----------------------------|-------------|
| 3.579545 - 3.999 | 180 |
| 4.000 - 4.999 | 150 |
| 5.000 - 6.999 | 100 |
| 7.000 - 14.999 | 50 |
| 15.000 - 50.0 (fund) | 40 |
| 28.01 - 60.0 (3rd overtone) | 100 |

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABSM3A - Frequency - - R - - - - -

| Height max. | |
|-------------|------------|
| Blank | 0.20 (5.1) |
| 2 | 0.18 (4.5) |
| 3 | 0.15 (3.8) |

| Frequency | |
|------------|--|
| XX.XXX MHz | |

| Load Capacitance | |
|--|--|
| Please specify CL in pF or S for Series (10 to 33pF) | |

| Custom 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 | |
|-----------|---------------|
| T | Tape and Reel |

| Mode | |
|------|----------------------------|
| F | Fundamental AT for F>30MHz |
| FB | Fundamental BT for F>30MHz |

| Freq. Stability | |
|-----------------|----------|
| U* | ± 10 ppm |
| G** | ± 15 ppm |
| X | ± 20 ppm |
| W | ± 25 ppm |
| Y | ± 30 ppm |
| H | ± 35 ppm |
| Z | ± 50 ppm |

* -10°C to 60°C only

** Temp option E, B, C and N only

Note: Fundamental BT frequency stability
±100ppm max. at -10°C to +60°C only



MICROPROCESSOR AT49 4 PADS SMD CRYSTAL

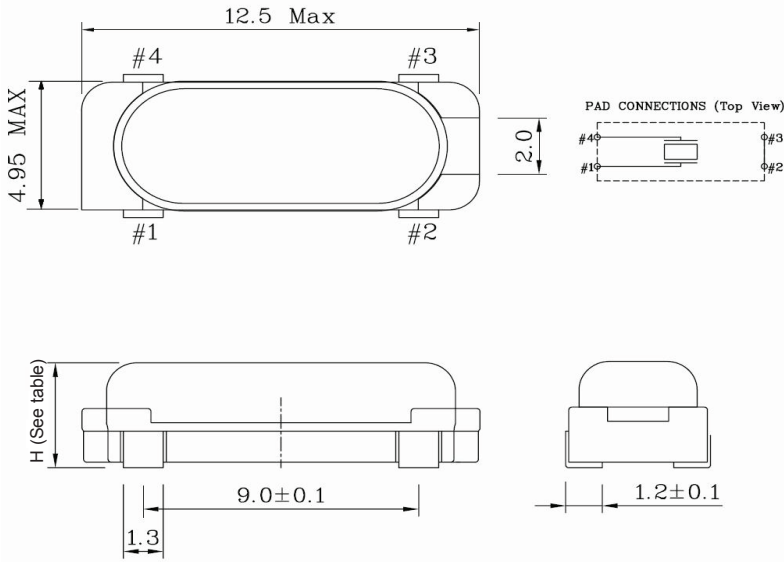


12.5 x 4.95 x H

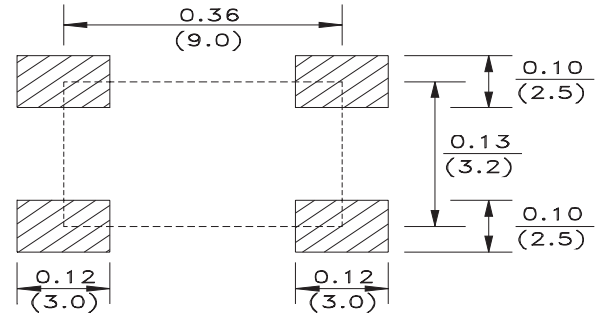


RoHS
Compliant

OUTLINE DRAWING:



Recommended land pattern

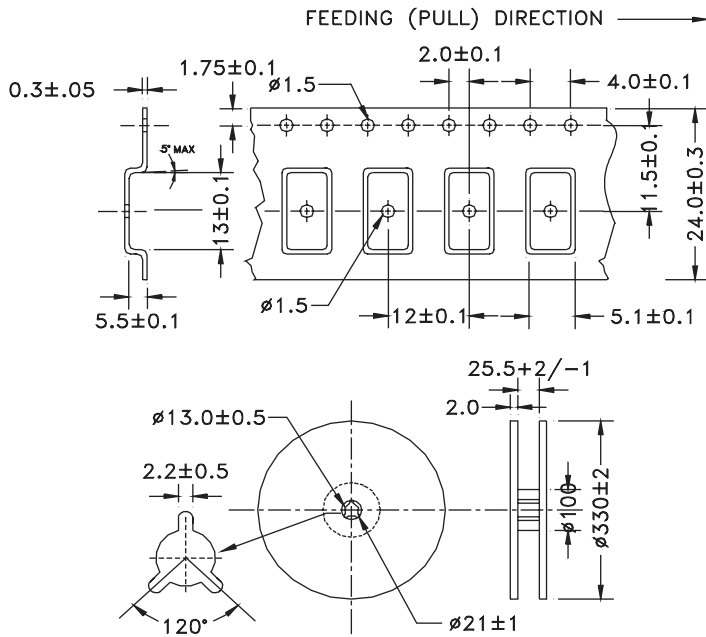


| Part No | H (max.) |
|---------|------------|
| ABSM3A | 0.20 (5.1) |
| ABSM32A | 0.18 (4.5) |
| ABSM33A | 0.15 (3.8) |

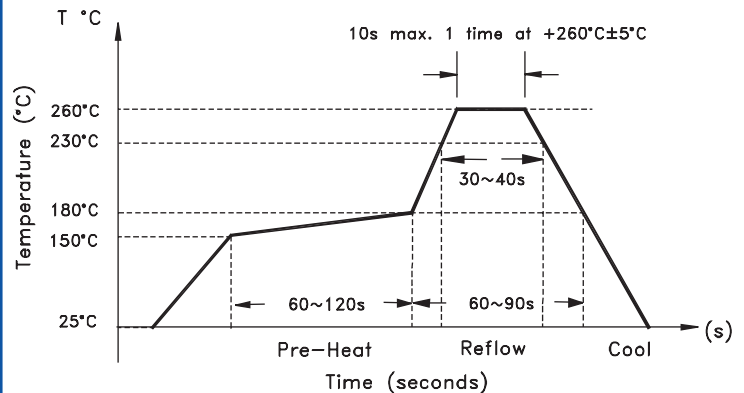
Dimensions: Inches (mm)

TAPE & REEL:

T= tape and reel (1,000pcs/reel)



REFLOW PROFILE



ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 08.24.10**

30332 Esperanza, Rancho Santa Margarita, California 92688

tel 949-546-8000 | fax 949-546-8001 | www.abracon.com