

MICROPROCESSOR AT49 4 PADS SMD CRYSTAL



12.5 x 4.95 x H

ABSM3A



RoHS
Compliant

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

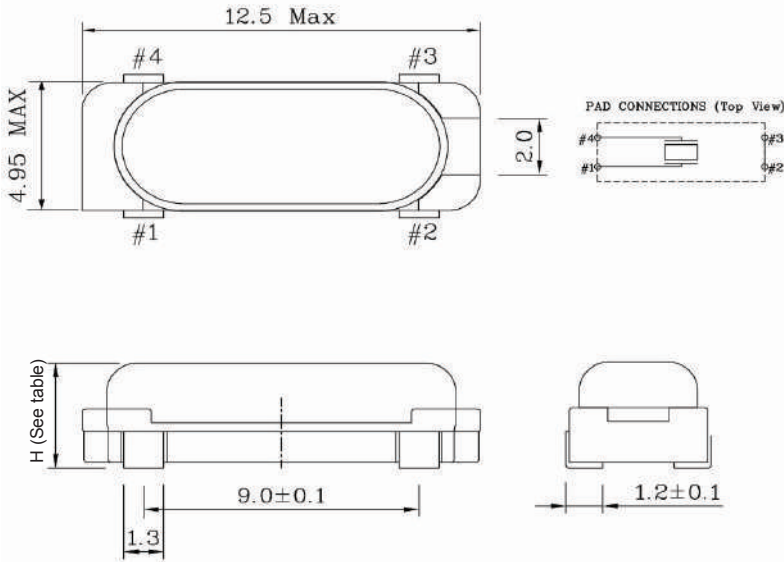


12.5 x 4.95 x H



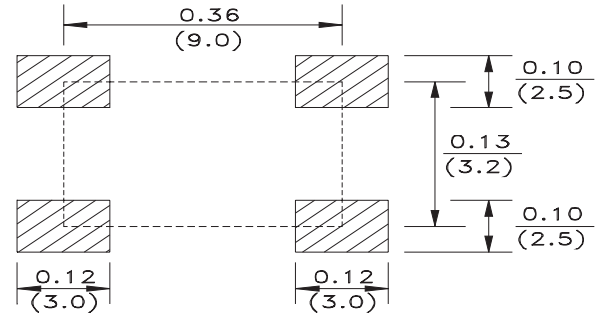
RoHS
Compliant

OUTLINE DRAWING:



Dimension : mm

Recommended land pattern

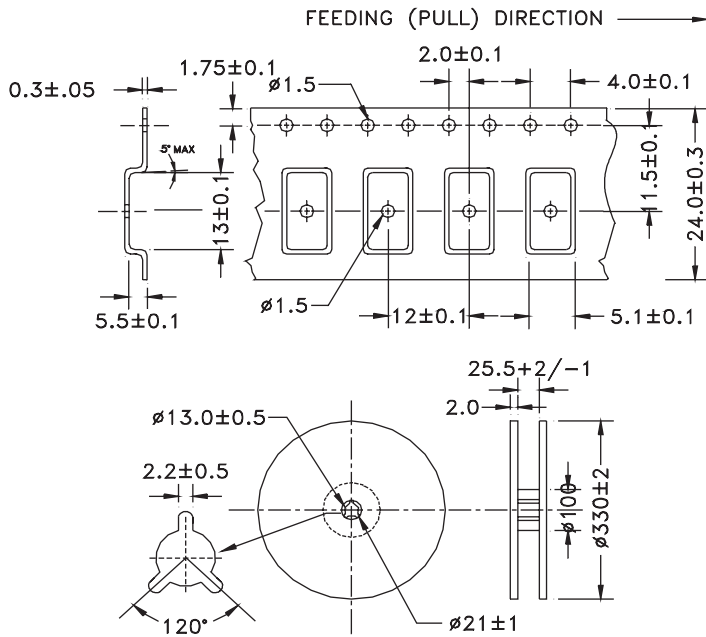


Part No	H (max.)
ABSM3A	0.20 (5.1)
ABSM32A	0.18 (4.5)
ABSM33A	0.15 (3.8)

Dimensions: Inches (mm)

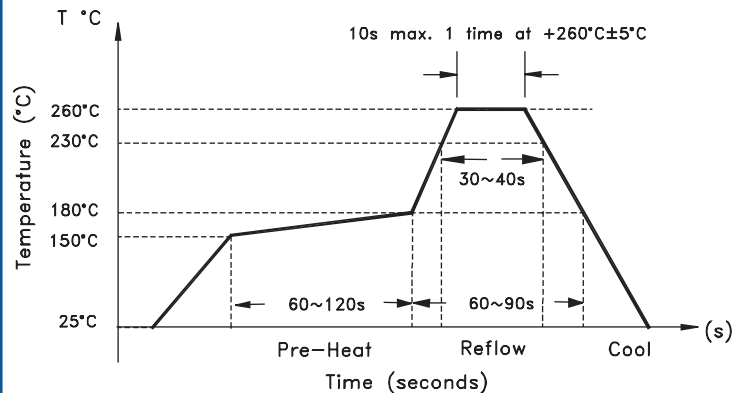
TAPE & REEL:

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



Dimensions: mm

REFLOW PROFILE



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