# AT-CUT LOW COST CERAMIC SMD CRYSTAL

ABM42C





4.0 x 2.5 x 1.2 mm

### > FEATURES:

- Industrial standard package 4.0x2.5, 4 pads
- Ideal for Cost Sensitive Commercial Electronics
- Suitable for High Volume Applications

### > APPLICATIONS:

- Laptop computers
- Computer peripherals
- Home network modem

## STANDARD SPECIFICATIONS:

| PARAMETERS  |  |
|---|--|
| ABRACON P/N:  | ABM42C Series  |
| Frequency range:  | 12.0 MHz to 48 MHz                                   |
| Operation Mode:   | AT-cut (Fundamental for <36MHz, 3rd OT for >36MHz)   |
| Operating temperature:                                      | -10°C to + 60°C (see options)                        |
| Storage temperature:  | -40°C to +85°C                                       |
| Freq. Tolerance at +25° C:                                  | ± 30ppm max. (Contact ABRACON for tighter tolerance) |
| Freq. stability over operating temperature (Ref to +25° C): | ± 50ppm max. (Contact ABRACON for tighter stability) |
| Equivalent series resistance:                               | See Table 1  |
| Shunt capacitance C0:                                       | 7pF max  |
| Load capacitance CL:  | 18pF (see option)                                    |
| Drive Level:  | 100uW max  |
| Aging @ 25°C per year:                                      | ±10ppm max   |
| Insulation Resistance:                                      | 500Mohms min at 100Vdc ± 15V                         |

#### **TABLE 1**

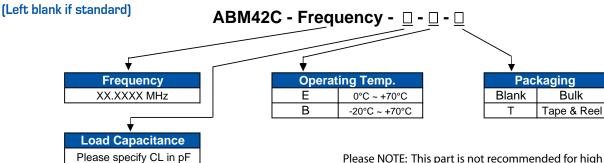
| Frequency (MHz) | <b>ESR (</b> Ω) |
|-----------------|-----------------|
| 12.000 - 19.999 | 80              |
| 20.000 - 25.999 | 70              |
| 26.000 - 36.000 | 50              |
| 36.001 - 48.000 | Contact ABRACON |

#### **Test Condition**

Parts shall be tested under the condition of +20±15°C of the temperature, +65%±20%RH of the humidity unless the standard condition of +25±2°C of the temperature, +65%±5%RH of the humidity is specified.

## > OPTIONS AND PART IDENTIFICATION:

(From 12 to 30)



<u>Please NOTE</u>: This part is not recommended for high reliability applications such as automotive, medical, or safety related applications. Please contact ABRACON for information regarding our high reliability products and for application assistance.





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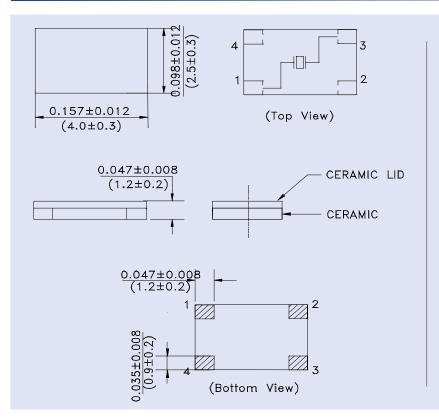
ABM42C

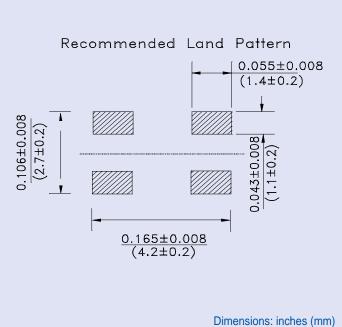




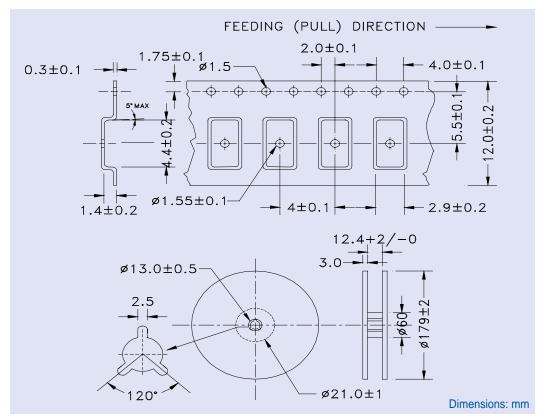
4.0 x 2.5 x 1.2 mm

# **OUTLINE DRAWING:**





# TAPE & REEL: T = Tape and reel 1,000pcs/reel



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ABRACON IS ISO 9001 / QS 9000 CERTIFIED



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