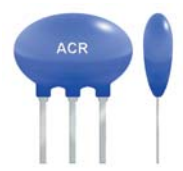


HIGH FREQUENCY MHZ LEADED WASHABLE AUTOMOTIVE GRADE CERAMIC CRYSTAL



Size Varies

ACR

FEATURES:

- Excellent environmental resistance
- Low cost timing solution
- Built-in capacitors save space & components

APPLICATIONS:

- Microprocessor clocks
- Electric appliances
- Remote controls

STANDARD SPECIFICATIONS:

| Part Number (X.XX denotes freq. in MHz) | Frequency Tolerance at 25°C | Frequency Stability at -20°C to +80°C | Aging in 10 years | IC Tested | Vdd | Total |
|--|-----------------------------|---------------------------------------|-------------------|------------|-----|-------|
| ACR-X.XXM 2.000 MHz - 6.00 MHz | ± 0.5% | ± 0.3% | ±0.2% | MC14069UBP | 5V | ±1.0% |
| ACR-X.XXM 6.01 MHz - 8.00 MHz | ± 0.5% | ± 0.3% | ±0.2% | MC14069UBP | 5V | ±1.0% |
| ACR-X.XXM 8.01 MHz - 13.49 MHz | ± 0.5% | ± 0.9% | ±0.3% | MC14069UBP | 12V | ±1.7% |
| ACR-X.XXM 13.50 MHz - 50.00 MHz | ± 0.5% | ± 0.3% | ±0.2% | TC74HCU04 | 5V | ±1.0% |

| ITEM | SPECIFICATION |
|-----------------------------|-------------------|
| Storage temperature: | - 40°C to + 125°C |
| Oscillation Frequency Range | ± 0.3% max. |
| Capacitance Change | ± 20% max. |

| FREQ (MHz) | H (max.) | C1=C2 (pF) ±20% built in |
|---------------|----------|--------------------------|
| 2.00 ~ 6.00 | 8.0 | 30.0 |
| 6.01 ~ 8.00 | 8.0 | 30.0 |
| 8.01 ~ 13.00 | 10.0 | 22.0 |
| 13.01 ~ 20.00 | 10.0 | 15.0 |
| 20.01 ~ 25.99 | 10.0 | 15.0 |
| 26.00 ~ 50.00 | 10.0 | 5.0 |

MARKING:

X.XXMZY
 - X.XX (Frequency in MHz)
 (First 3 digits of frequency) Ex: 4.00, 3.57, 2.44, 32.0;
 Z Month (A to L); Y Year 2 for 2002

OPTIONS AND PART IDENTIFICATION (Left blank if standard):

ACR - XX.XXMHz - CXX - IOXX - SOXX - AOXX - Packaging
 XX.XX: Freq in MHz

C Option:
Specify Cap value in pF

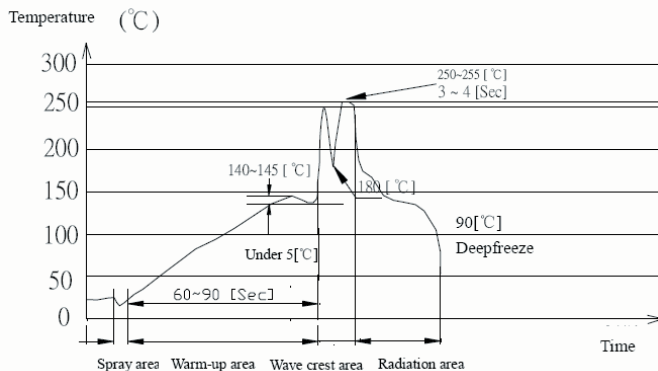
SO Option:
Frequency Stability in %

AO Option:
Aging in %

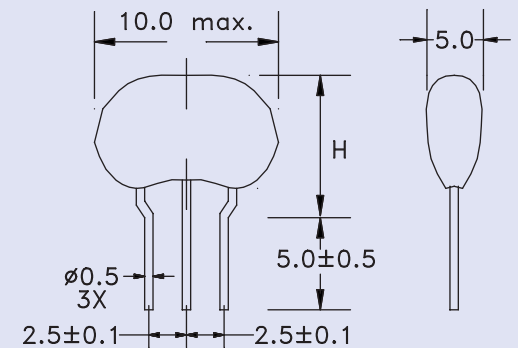
IO Option:
Frequency Tolerance in %

Packaging option:
Ammo for ammo packing

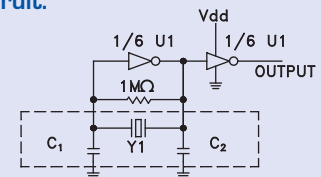
WAVE PEAK SOLDER PROFILE: Lead free solder (standard) Temp Graph.



OUTLINE DRAWING:



Test Circuit:



U1: CD4069UB
 74HCU04
 Y1: RESONATOR
 C1 C2 : 30pF ± 20% (Built-in)

Dimensions: inch (mm)

ABRACON IS
 ISO 9001 / QS 9000
 CERTIFIED

rev2.1-10/06

ABRACON CORPORATION

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