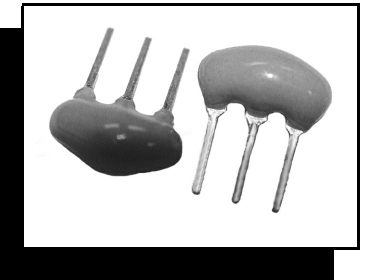


HIGH FREQUENCY LEADED • BUILT-IN CAPACITORS, INDUSTRIAL GRADE  
**CERAMIC RESONATORS**  
**AWCR Series**



**FEATURES:**

- Excellent environmental resistance, Low cost.
- High-stability, Washable type
- Low cost timing solution.
- Built-in capacitors save space & components.
- Small size , Light weight

**APPLICATIONS:**

- Microprocessor clocks.
- Automotive controllers.
- Electric appliances.
- Industrial controllers.
- Remote controls.
- General timing.

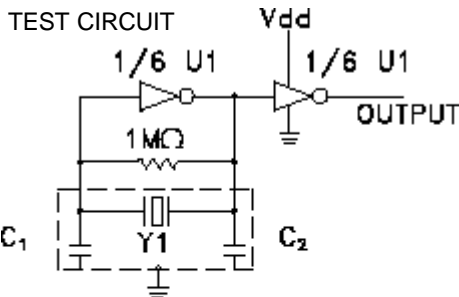
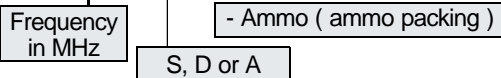
**STANDARD SPECIFICATIONS**

Frequency Range (MHz)	Frequency Tolerance (at 25°C)	Frequency Stability (at -20°C to 80°C)	Resonant Impedance (Ω) max.	Operating temperature	Aging (10 yrs)	IC Tested	Vdd
1.8 ~ 6.00	±0.5%	±0.3%	100 for 1.80 ≤ F < 3.0 50 for 3.0 ≤ F < 3.5 30 for 3.5 ≤ F ≤ 6.0	See table 2	±0.3%	MC14069UBP	5V
6.01 ~ 13.00	±0.5%	±0.3%	30	See table 2	±0.3%	MC14069UBP	12V
13.01 ~ 50.00	±0.5%	±0.3%	40	See table 2	±0.3%	TC74HCU04	5V

Storage temperature: -40°C to +125°C  
 Environmental and mechanical specifications, see appendix C. Group 6.  
 Marking, see appendix G. Recommended handling, see appendix F.  
 Application notes, see appendix A.  
 Ammo packing, see appendix H.(1,500 pcs/box)

**ORDERING OPTIONS**

AWCRXX.XXMX - Packaging



U1: MC14069UBP  
 74HCU04  
 Y1: RESONATOR

Built-in C1 C2: 30pF ± 20% (1.8M ~ 20.0MHz)  
 15pF ± 20% (20.01M ~ 25.99MHz)  
 5pF ± 20% (26.0M ~ 50MHz)

Dimensions: Inches (mm)

1	Input
2	Ground
3	Output

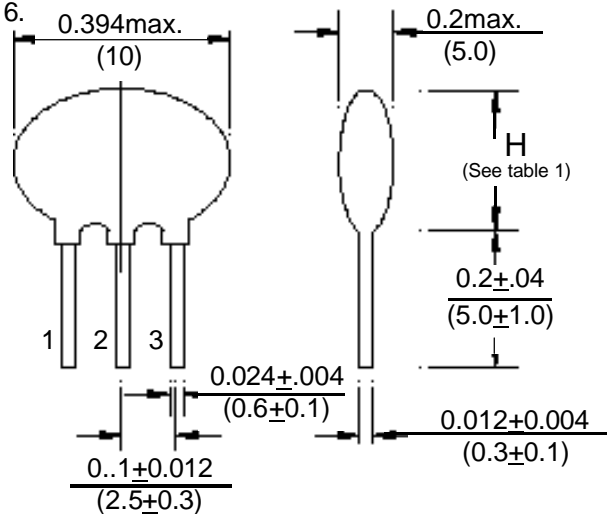


Table 1

Freq. (MHz)	H (max.)
1.8 ~ 6.0	0.315 (8.0)
6.01 ~ 50.0	0.395(10.0)

Table 2

Series	Operating temperature
MS	-20°C to +80°C
MD	-40°C to +85°C
MA	-40°C to +125°C

(Freq.stability ~ ± 0.5% typ.)  
 (Freq.stability ~ ± 0.7% typ.)

NOTE: Left blank if standard • All specifications and markings subject to change without notice

ABRACON IS  
 ISO 9001 / QS 9000  
 CERTIFIED



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## **Washability Specification**

**This product can be washed using the following solvents  
under the suggested conditions:**

<b>Solvents:</b>
HCFC, Isopropyl Alcohol, Trichloroethane, Tap water, Demineralized Water, Pine Alpha ST-100S
<b>Ultrasonic Wash:</b>
Less than 1 min. (Frequency:28KHz,Ouput:20W/L) Immersion Wash or others: Less than 5 min.
<b>Solvents temperature should be at 60°C or under 60°C</b>
<b>Drying:</b>
By air blow at 80°C max.