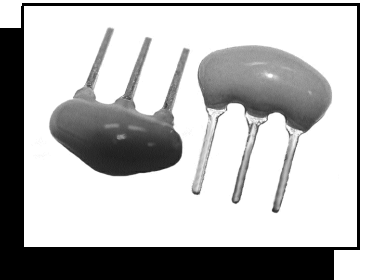


# HIGH FREQUENCY LEADED • BUILT-IN CAPACITORS, INDUSTRIAL GRADE CERAMIC RESONATORS AWCR Series



## 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

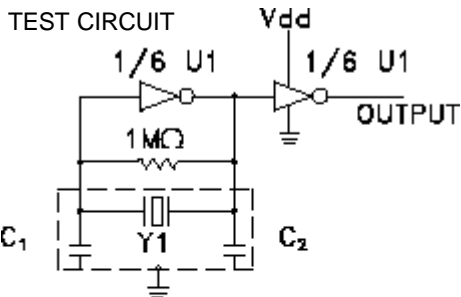
Frequency Range (MHz)	Frequency Tolerance (at 25°C)	Frequency Stability (at -20°C to 80°C)	Resonant Impedance (Ω) max.	Operating temperature	Aging (10 yrs)	IC Tested	Vdd
1.8 ~ 6.00	±0.5%	±0.3%	100 for $1.80 \leq F < 3.0$ 50 for $3.0 \leq F < 3.5$ 30 for $3.5 \leq F \leq 6.0$	See table 2	±0.3%	MC14069UBP	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

Frequency in MHz - Ammo ( ammo packing )  
S, D or A



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

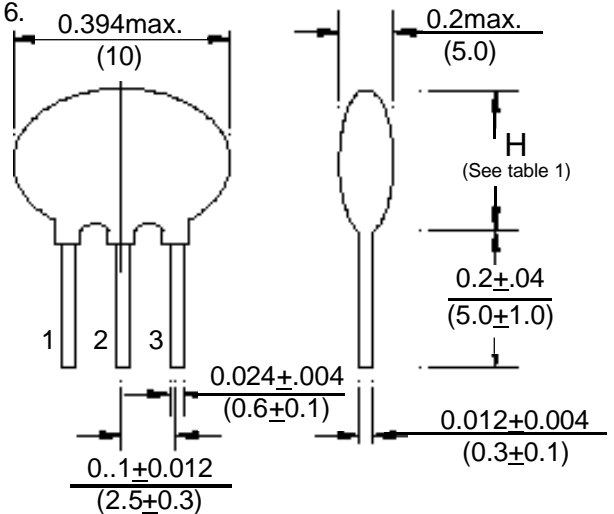


Table 1

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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**ABRACON**  
CORPORATION

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Rev. B  
01/2003

## **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.