

# HIGH FREQUENCY, SMD, WASHABLE INDUSTRIAL GRADE CERAMIC RESONATORS AWSZT Series

## FEATURES:

- Industrial grade.
- High stability washable type, reflow capable.
- Small size, light weight
- Excellent environmental resistance.

## APPLICATIONS:

- Remote control systems in vehicles.
- Telephones.
- Industrial electric appliances.
- Clock oscillation for microcontrollers.
- Household electric appliances.
- Mobile phone, DVD, CD-ROM

## STANDARD SPECIFICATIONS

Package Style	Frequency Range (MHz)	Frequency Tolerance (% at 25°C)	Stability (% at -40°C to 125°C)	Aging (10 yrs)	Total
7230	2.00 ~ 6.00	±0.5% (See Options)	±0.3% (See Options)	±0.2% (See Options)	±1.0%
7230	6.01 ~ 8.00	±0.5% (See Options)	±0.4% (See Options)	±0.2% (See Options)	±1.1%
3731	8.01 ~ 13.49	±0.5% (See Options)	±0.9% (See Options)	±0.5% (See Options)	±1.9%
3731 or 2520	13.50 ~ 20.00	±0.5% (See Options)	±0.4% (See Options)	±0.3% (See Options)	±1.2%
2520	20.01 ~ 50.00	±0.5% (See Options)	±0.4% (See Options)	±0.1% (See Options)	±1.0%

Operating temperature: -40°C to 125°C

Storage temperature: -40°C to 125°C

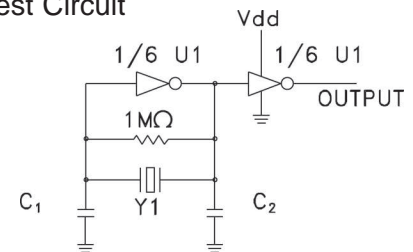
(\*) Stability vs. temperature: ±0.3% @ -20°C to +80°C

Packaging: Option Tape and Reel 2,000pcs (7230) and 4,000pcs (3731 or 2520)

We perform IC characterization to match your application.

Environmental and mechanical specification, Group 5A.

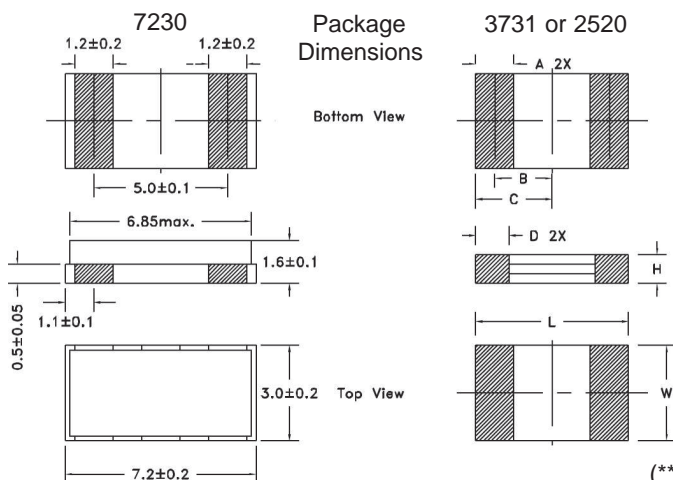
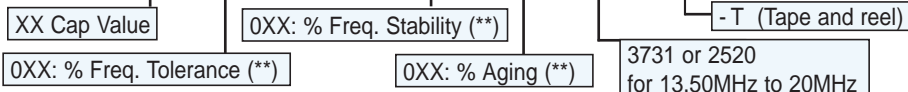
## Test Circuit



U1: CD4069UB  
74HCU04 (>8MHz)  
Y1: RESONATOR  
C1 C2 : 30pF ± 20%

## ORDERING OPTIONS

### AWSZT - Frequency - CXX - IOXX - S0XX - A0XX - 3731 - Packaging



Type	3731	2520
L ± 0.2	3.7	2.5
W ± 0.2	3.1	2.0
H	1.20 ± 0.2	1.5 max.
A	0.70 ± 0.3	0.5
B	1.50 ± 0.2	1.00 ± 0.2
C	1.85 ± 0.3	1.25 ± 0.2
D	0.6 ± 0.3	0.5

ex: AWSZT - 8.00MHz - C05 - IO15 - S03 - A01T

C1 = C2 = 10pF  
 ±0.15% of tolerance  
 ±0.3% of stability  
 ±0.1% of aging

Dimensions: mm

(\*\*) Please contact us for availability.



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

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 ISO 9001 / QS 9000  
 CERTIFIED