

LEADED CERAMIC RESONATOR

HWZT-MD

*C = Pb in ceramic (exempt per RoHS 2002/95/EC Annex (7)) ***C/RoHS**
Compliant



FEATURES:

- Low resonant impedance.
- Small size, Light weight.
- Low cost timing solution.

APPLICATIONS:

- Clock oscillation for microcontrollers
- Telephones
- Household electric appliances

STANDARD SPECIFICATIONS:

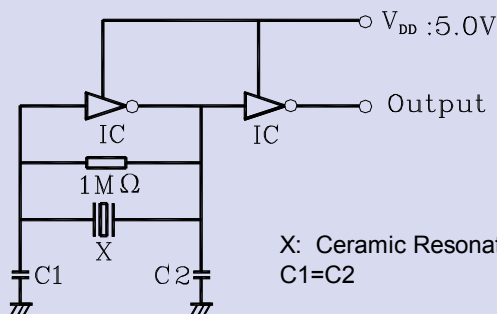
Item	Requirement
Frequency Range	2.00MHz to 6.00MHz
	8.01MHz to 50.00MHz
Resonant Impedance	See Table 2.1
Frequency Tolerance	± 0.5%
Frequency Stability	±0.3% max. (-25°C to +85°C)*
Withstanding Voltage	50V (DC , 1 min)
Rating Voltage	(1) D.C.Voltage
	(2) A.C. Voltage
Load Capacitance	See Table 2.1
Insulation Resistance	100M Ω min. (DC 10V)
Operation Temperature	-25°C to +85°C*
Storage Temperature	-55°C to +85°C
Aging Rate (Fosc)	±0.3% max. (From initial value)

* Please contact ABRACON for tighter stability and/or wider temperature range

Table 2.1

Frequency Range (MHz)	Resonant Impedance (Ro)(Ω) max	Load Capacitance C1=C2 (pF)
2.00 MHz - 2.99 MHz	80	30pF \pm 20%
3.00 MHz - 3.49 MHz	50	
3.50 MHz - 6.00 MHz	30	
8.01 MHz - 13.00 MHz	30	
13.01 MHz - 20.00 MHz		15pF \pm 20%
20.01 MHz - 25.99 MHz		
26.00 MHz - 50.00 MHz		

TEST CONDITION AND TEST CIRCUIT:



X: Ceramic Resonator
C1=C2

Parts shall be measured under a condition (Temp.: 20 \pm 15°C, Humidity: 65 \pm 20% R.H.) unless the standard condition (Temp: 25 \pm 2°C, Humidity: 65 \pm 5% R.H.) is regulated to measure

OPTIONS & PART IDENTIFICATION:

HWZT - XX.XXMD - □

Frequency
Frequency in MHz

Packaging
Blank for Bulk pack
A for AMMO pack*

* AMMO pack lead length 13.5mm

LEADED CERAMIC RESONATOR

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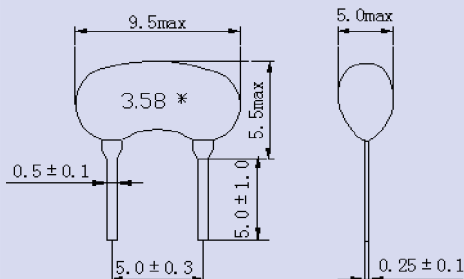
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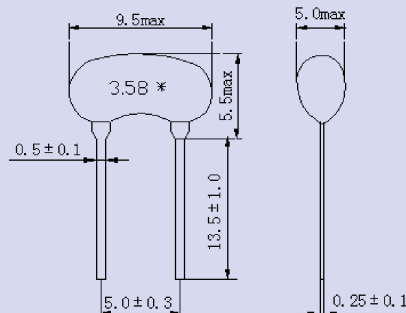
OUTLINE DRAWING:

Frequency Range: 2.00 MHz ~ 6.00 MHz (Low Profile)

Bulk Pack

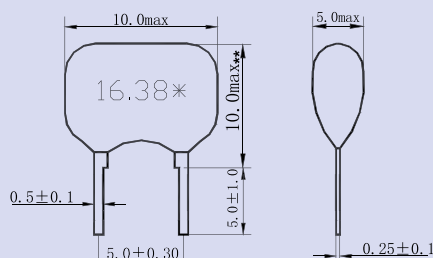


AMMO Pack



Frequency Range: 8.01 MHz ~ 50.00 MHz

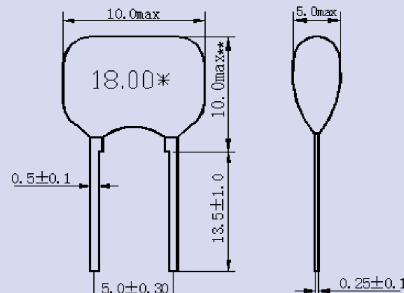
Bulk Pack



*:EIAJ MONTHLY CODE

**:
12.00MHz ~ 23.99MHz, 10.0max
24.00MHz ~ 31.99MHz, 7.5max
32.00MHz ~ 50.00MHz, 6.5max

AMMO Pack



*:EIAJ MONTHLY CODE

Dimensions: mm

CAUTION

- Do not apply excess mechanical stress to the component body or terminations. Do not attempt to re-form or bend the components as this will cause damage to the component.
- This component is not hermetically sealed. Do not clean or wash the component.
- Reflow soldering: Do not use strong acidity flux, such as flux with chlorine content of greater than 0.2wt% during reflow Soldering.
- Do not expose the component to open flame.
- This specification applies to the functionality of the component as a single unit. Customers are advised to insure that the component is thoroughly evaluated in the particular application.
- Shelf life: The warranted shelf life of this product is six months after the delivery date under the conditions of sealed, unopened, original packaging.
- Storage conditions: If the product is to be stored for a period greater than six months after the delivery date, it is recommended that customers confirm the solderability and characteristics for the product prior to use.
- This product is not recommended for use in the following applications: Automotive, Medical, Military, Safety, or any other high-reliability, life-dependant application. Contact Abracon Corporation prior to using this product when in doubt.