

# LEADED CERAMIC RESONATOR

HWZT-MD

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



Size Varies

## FEATURES:

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

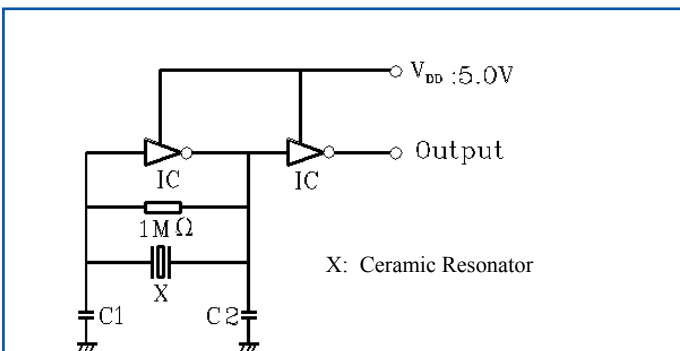
## APPLICATIONS:

- Clock oscillation for microcontrollers
- Telephones
- Household electric appliances

## STANDARD SPECIFICATIONS:

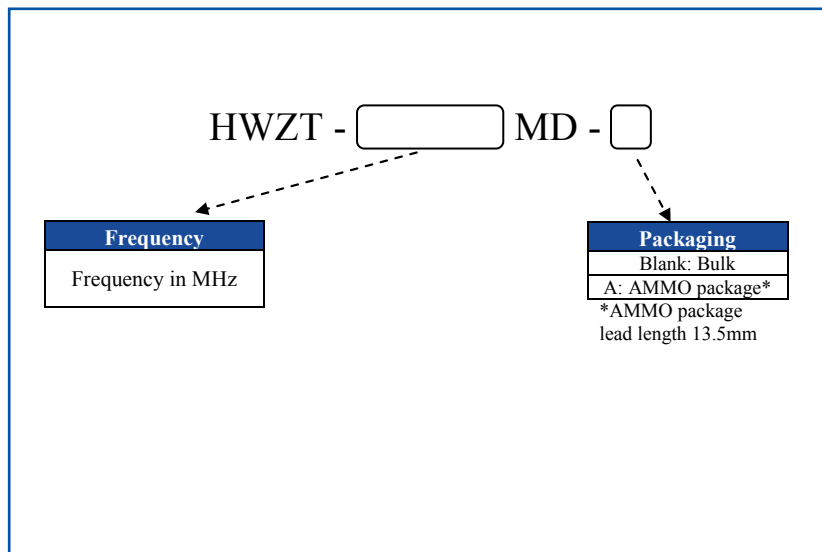
| Parameters   | Minimum      | Typical | Maximum | Units | Notes                 |
|--|--------------|---------|---------|-------|-----------------------|
| Frequency Range                                    | 2.00         | -----   | 6.00    | MHz   |                       |
|  | 12.51        | -----   | 60.00   |       |                       |
| Resonant Impedance (Ro)                            | -----        | -----   | 80      | Ω     | 2.00 MHz ~ 2.99 MHz   |
|  | -----        | -----   | 30      |       | 3.00 MHz ~ 6.00 MHz   |
|  | -----        | -----   | 30      |       | 12.51 MHz ~ 60.00 MHz |
| Standard Load Capacitance for test circuit (C1=C2) | 24           | 30      | 36      | pF    | 2.00 MHz ~ 6.00 MHz   |
|  | 24           | 30      | 36      |       | 12.51 MHz ~ 20.00 MHz |
|  | 12           | 15      | 18      |       | 20.01 MHz ~ 25.99 MHz |
|  | 4            | 5       | 6       |       | 26.00 MHz ~ 60.00 MHz |
| Frequency Tolerance                                | -0.5         | -----   | +0.5    | %     |                       |
| Frequency Stability                                | -0.3         | -----   | +0.3    | %     | -25°C to +85°C        |
| Withstanding Voltage                               | -----        | -----   | 50      | Vdc   | DC , 1 min            |
| Rating Voltage                                     | D.C. Voltage | -----   | 6       | Vdc   |                       |
|  | A.C. Voltage | -----   | 15      | Vp-p. |                       |
| Insulation Resistance                              | 100          | -----   | -----   | MΩ    | 10Vdc, 1min           |
| Operation Temperature                              | -25          | -----   | +85     | °C    |                       |
| Storage Temperature                                | -55          | -----   | +85     | °C    |                       |
| Aging Rate (Fosc)                                  | -0.3         | -----   | 0.3     | %     | From initial value    |

## TEST CONDITION AND TEST CIRCUIT:



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

## OPTIONS & PART IDENTIFICATION:



# LEADED CERAMIC RESONATOR



Size Varies

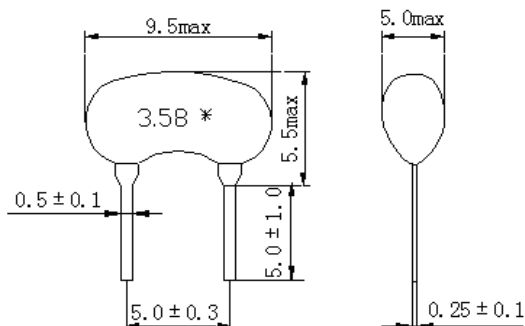
HWZT-MD

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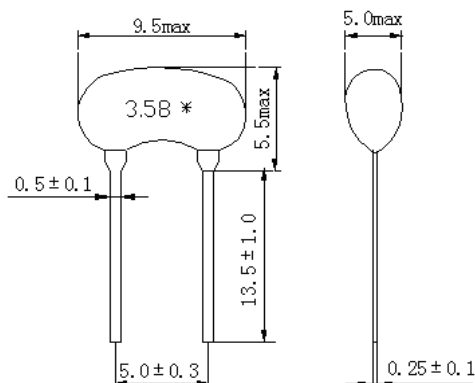
## OUTLINE DRAWING:

### Freq. Range: 2.00 ~ 6.00MHz (Low Profile)

Bulk:

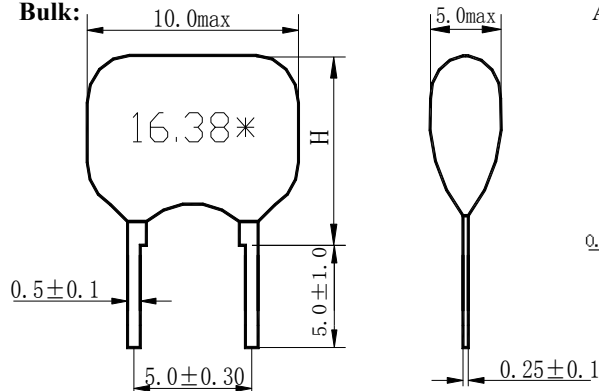


AMMO:

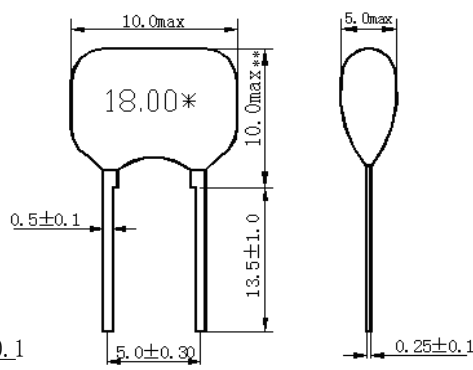


### Freq. Range: 12.51 ~ 60.00MHz

Bulk:



AMMO:



H : 12.51 ~ 23.99MHz, 10.0mm max  
24.00 ~ 31.99MHz, 7.5mm max  
32.00 ~ 60.00MHz, 6.5mm max

\*:EIAJ MONTHLY CODE

Dimension: mm

## CAUTION

- (1) 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.
- (2) This component is not hermetically sealed. Do not clean or wash the component.
- (3) Reflow Soldering: Do not use strong acidity flux, such as flux with chlorine content of greater than 0.2wt% during Reflow Soldering.
- (4) Do not expose the component to open flame.
- (5) This specification applies to the functionality of the component as a single unit.
- (6) Shelf Life: The warranted Shelf Life of this product is Six Months after the Delivery Date under the conditions of sealed, unopened, original packaging.
- (7) 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.
- (8) This product is not recommended for use in the following applications: Automotive, Medical, Military, Safety, or any other high-reliability, life dependant applications. Contact Abracon Corporation prior to using this product when in doubt.

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ABRACON IS  
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CERTIFIED



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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