

ECN/PCN No.:

For Manufacturer			
Product Description: Leaded ceramic resonator	Abracon Part Number / Part Series: HWZT-MD		☒ Series ☐ Part Number
Affected Revision: F	New Revision: EOL	Application:	☐ Safety ☐ Non-Safety
Prior to Change:			
After Change:			
Cause/Reason for Change:			
Change Plan			
Effective Date: 4/10/2020	Additional Remarks:		
Change Declaration:			
Issued Date:	Issued By:	Issued Department: Engineering	
Approval: Syed Raza Engineering VP	Approval: Reuben Quintanilla Quality Manager	Approval: Ying Huang Purchasing Director	
For Abracon EOL only			
Last Time Buy (if applicable): Only Configurations listed on the Appendix on next page are available for last time buy: 9/15/2020		Alternate Part Number / Part Series:	
Additional Approval:	Additional Approval:	Additional Approval:	
Customer Approval (If Applicable)			
Qualification Status: ☐ Approved ☐ Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>			
Customer Part Number:		Customer Project:	
Company Name:	Company Representative:	Representative Signature:	
Customer Remarks:			

Part Number
HWZT-11.00MD
HWZT-14.26MD
HWZT-14.40MD
HWZT-16.00MD
HWZT-16.00MD-A
HWZT-2.00MD
HWZT-2.45MD
HWZT-2.45MD-A
HWZT-20.00MD
HWZT-3.00MD
HWZT-3.28MD
HWZT-3.36MD
HWZT-3.56MD-A
HWZT-3.58MD
HWZT-3.58MD-A
HWZT-3.58MD-AMMO
HWZT-4.00MD
HWZT-4.19MD
HWZT-4.91MD
HWZT-5.00MD
HWZT-6.00MD
HWZT-6.00MD-AMMO

LEADED CERAMIC RESONATOR

HWZT-MD

RoHS/RoHS II Compliant

Pb in ceramic, exemption (7c-I)



Size Varies

FEATURES:

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

APPLICATIONS:

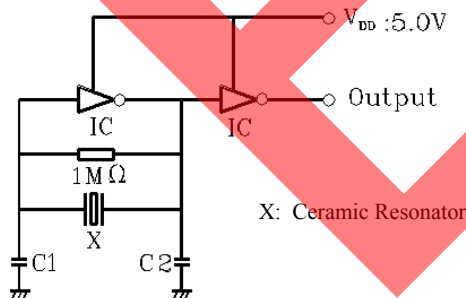
- Clock oscillation for microcontrollers
- Telephones
- Household electric appliances

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			M Ω	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:

OPTIONS & PART IDENTIFICATION:



X: Ceramic Resonator

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

HWZT - MD -

Frequency

Frequency in MHz

Packaging

Blank: Bulk

A: AMMO package*

*AMMO package

lead length 13.5mm



ABRACON
CORPORATION

LEADED CERAMIC RESONATOR

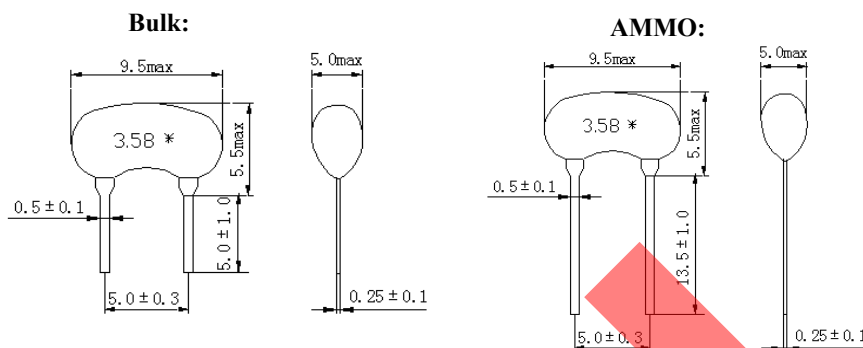
HWZT-MD

RoHS/RoHS II Compliant
Pb in ceramic, exemption (7c-I)

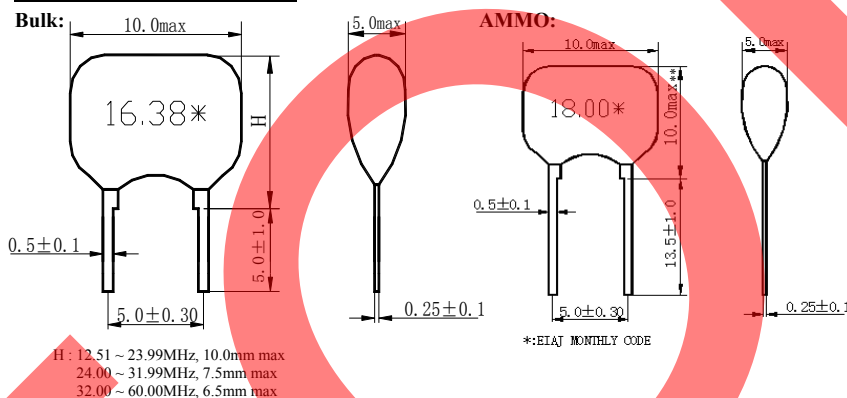


OUTLINE DRAWING:

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



Freq. Range: 12.51 ~ 60.00MHz



Dimension: mm

Packaging:

Bulk: 500pcs/plastic bag

AMMO: 2000pcs/box

Note: upon opening the original packaging, it is recommended that the product be used within 1 year. If the product will not be used within 1 year, it is recommended that the product be re-sealed in airtight packaging according to MSL 1 requirements to maintain solderability.

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) Storage Conditions: If the product is to be stored for a period greater than 1 year after the Delivery Date, it is recommended that customers confirm the solderability and characteristics for the product prior to use.
- (7) 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.

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
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CERTIFIED

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30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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