

# LEADED, LOW FREQUENCY kHz BAND CERAMIC RESONATORS



LXZT series

Pb in ceramic  
(exempt per RoHS 2002/95/EC Annex (7))

**RoHS**  
Compliant

## FEATURES:

- Standard frequency range from 190kHz to 1250kHz.
- Low cost timing solution.
- Low resonant impedance.

## APPLICATIONS:

- Microprocessor clocks.
- Electrical appliances.
- Remote controls.

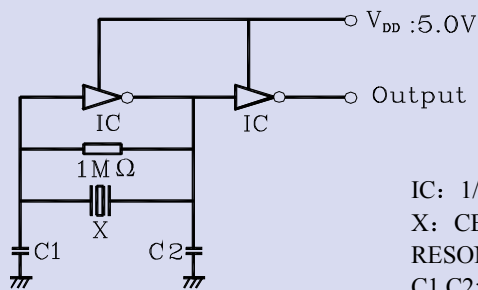
## STANDARD SPECIFICATIONS:

Item	Requirement
Oscillation Frequency	190.00kHz to 1250.00kHz
Resonant Impedance	See Table 2.1
Frequency Tolerance and stability	See Table 2.1
Withstanding Voltage (V)	50 (DC , 1 min)
Rating Voltage	
(1) D.C. Voltage	6 V.D.C. max
(2) A.C. Voltage	15 Vp-p. max
Load Capacitance	See Table 2.1
Insulation Resistance	100M $\Omega$ min. (10V DC 1min)
Operating Temperature	-25°C to + 85°C
Storage Temperature	-40°C to +85°C
Aging Rate (Fosc)	$\pm 0.3\%$ (From initial value)

Table 2.1

Frequency Range (kHz)	C1 (pF) $\pm 20\%$	C2 (pF) $\pm 20\%$	Resonant Impedance	Frequency Stability at -25°C to +85°C	Freq. Tolerance at 25°C
190 - 249	330	470	20 $\Omega$ max.	$\pm 0.3\%$	$\pm 1.0$ kHz
250 - 374	220	470	20 $\Omega$ max.	$\pm 0.3\%$	$\pm 1.0$ kHz
375 - 429	120	470	20 $\Omega$ max.	$\pm 0.3\%$	$\pm 2.0$ kHz
430 - 509	100	100	20 $\Omega$ max.	$\pm 0.3\%$	$\pm 2.0$ kHz
510 - 699	100	100	30 $\Omega$ max.	$\pm 0.3\%$	$\pm 2.0$ kHz
700 - 999	100	100	70 $\Omega$ max.	$\pm 0.3\%$	$\pm 0.5\%$
1000 - 1250	100	100	100 $\Omega$ max.	$\pm 0.3\%$	$\pm 0.5\%$

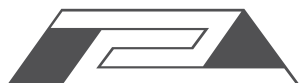
## TEST CIRCUIT:



IC: 1/6TC4069UBP $\times 2$   
X: CERAMIC  
RESONATOR  
C1,C2: Load Capacitance

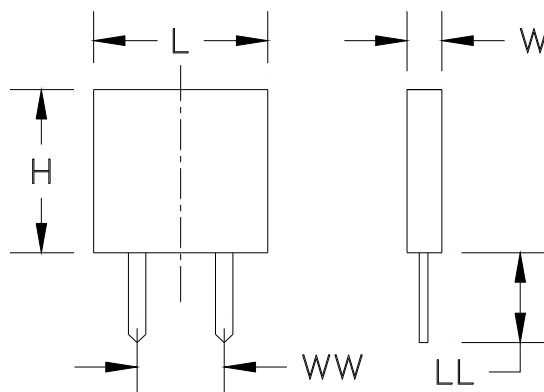
## OPTIONS & PART IDENTIFICATION:

**LXZT - Frequency**





## OUTLINE DIMENSIONS



Dimension : Inches (mm)

Frequency Range	L	W	H	LL	WW
190-249 kHz	0.53 (13.5)	0.14 (3.6)	0.58 (14.7)	0.32 (8.0)	0.39 (10.0)
250-374 kHz	0.43 (11.0)	0.14 (3.6)	0.48 (12.2)	0.28 (7.0)	0.30 (7.7)
375-429 kHz	0.31 (7.9)	0.14 (3.6)	0.37 (9.3)	0.24 (6.0)	0.20 (5.0)
430-699 kHz	0.28 (7.0)	0.14 (3.5)	0.35 (9.0)	0.16 (4.0)/0.24 (6.0)	0.20 (5.0)
700-1250 kHz	0.20 (5.1)	0.09 (2.2)	0.25 (6.3)	0.16 (4.0)	0.10 (2.5)

## 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. The customer is advised to insure that the component is thoroughly evaluated in the application circuit.
- 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 the customer confirm the solderability and characteristics for the product prior to use.
- This product is not recommended for use in industrial related Automotive, Medical, Safety, Military, or other high-reliability life dependant applications. Contact Abracon Corporation prior to using this product when in doubt.