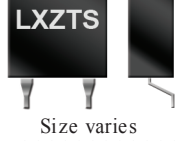


# SMD LOW FREQUENCY kHz BAND CERAMIC RESONATORS

**LXZTS series**

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

**RoHS**  
Compliant



## FEATURES:

- Standard frequency range from 400kHz to 1000kHz
- Suitable for RoHS compliant reflow process
- Low cost timing solution
- Low resonant impedance
- SMD type package with formed leads

## APPLICATIONS:

- Microprocessor clocks
- Electrical appliances
- Remote controls

## STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Standard Frequencies ( $F_{osc}$ )	400, 455, 500, 600, 800, 1000			kHz	Please contact Abracon for other frequencies
Frequency Accuracy	See Table 1				
Resonant Impedance $R_0$	See Table 1			$\Omega$	
Temperature Coefficient	-0.3	-----	+0.3	%	Oscillation Freq. drift, -25 ~ +85°C
Aging*	-0.3	-----	+0.3	%	10 years, from initial value
Withstanding Voltage	-----	-----	50	Vdc	1 minute
Insulation Resistance $R_i$	100	-----	-----	M $\Omega$	10V, 1 minute
Operating Temperature Range	-25	-----	+85	°C	
Storage Temperature Range	-40	-----	+85	°C	
Rating Voltage UR	-----	-----	6	Vdc	
	-----	-----	15	Vp-p	

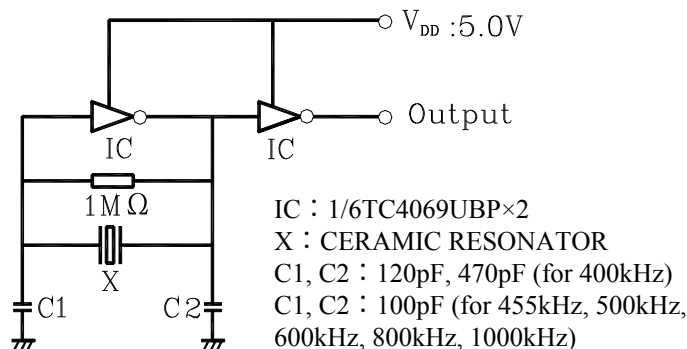
\* Components shall be left in a chamber of +85±2°C for 1000 hours, and then measured after leaving in natural condition for 1 hour.

Table 1

Frequency (kHz)	Frequency Accuracy	Resonant Impedance $R_0$ ( $\Omega$ )
400	±2.0 (kHz)	20
455	±2.0 (kHz)	20
500	±2.0 (kHz)	20
600	±2.0 (kHz)	30
800	±0.5 (%)	70
1000	±0.5 (%)	100

## TEST CIRCUIT:

Parts shall be measured under a condition (Temp. : 20°C±15°C, Humidity : 65%±20% R.H.) unless the standard condition (Temp. : 25°C ±3°C, Humidity : 65%±5% R.H.) is regulated to measure.



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Compliant**

LXZTS

Size varies

## OPTIONS & PART IDENTIFICATION:

LXZTS -  kHz -

### Frequency in MHz

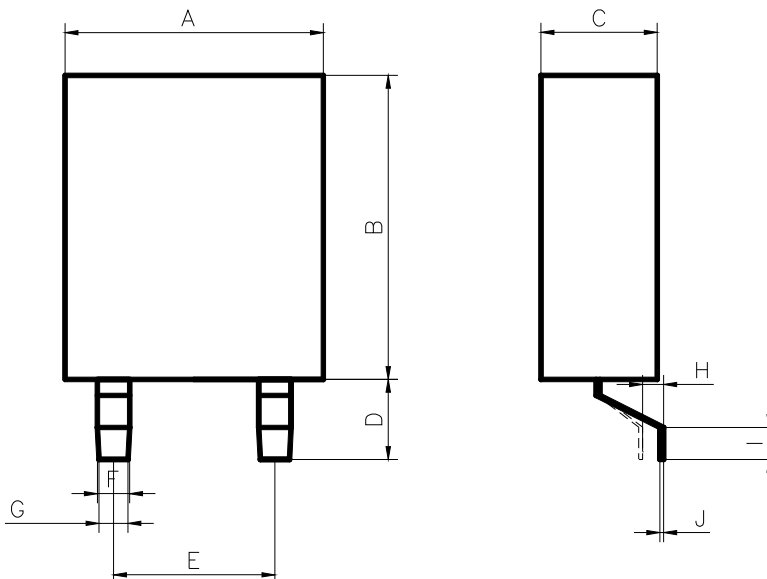
Please specify the frequency in kHz.  
e.g. 455kHz, 600kHz

### Packaging

Blank: Bulk

T: Tape and reel

## OUTLINE DIMENSIONS:



F <sub>osc</sub> (kHz)	A	B	C	D	E	F	G	H	I	J
400	8.0±0.5	9.0±0.5	3.5±0.5	2.0±0.5	5.0±0.5	1.1±0.1	0.9±0.1	0+0.1/-0.4	1.0±0.3	0.15±0.05
455	7.5±0.3	8.5±0.3	3.3±0.3	2.5±0.5	5.0±0.5	1.1±0.1	0.9±0.1	0+0.1/-0.4	1.0±0.5	0.15±0.02
500	7.5±0.5	8.5±0.5	3.3±0.5	2.0±0.5	5.0±0.5	1.0±0.1	---	0+0.1/-0.4	1.0±0.3	0.15±0.05
600	7.0±0.3	8.5±0.3	3.0±0.3	2.5±0.5	5.0±0.5	1.1±0.1	0.9±0.1	0+0.1/-0.4	1.0±0.5	0.15±0.02
800	5.0±0.3	6.0±0.3	2.2±0.3	2.0±0.5	2.5±0.5	0.8±0.2	---	0+0.1/-0.4	1.0±0.5	0.12±0.02
1000	5.0±0.5	6.0±0.5	2.2±0.5	2.0±0.5	2.5±0.5	0.8±0.2	0.7±0.2	0+0.1/-0.4	1.0±0.3	0.12±0.05

Dimensions: mm

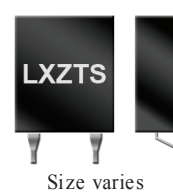


# SMD LOW FREQUENCY kHz BAND CERAMIC RESONATORS

**LXZTS series**

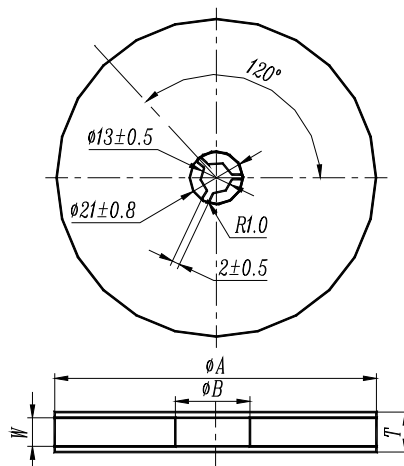
Pb in ceramic  
(exempt per RoHS 2002/95/EC Annex (7))

**RoHS**  
Compliant



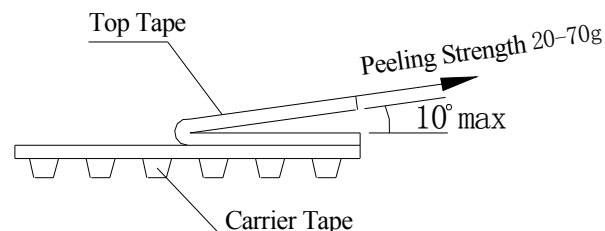
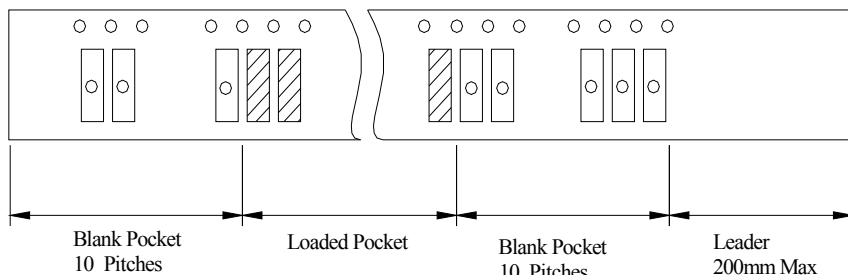
## TAPE AND REEL:

T: 1000pcs/ reel for 400kHz, 455kHz, 500kHz, 600kHz  
T: 2500pcs/ reel for 800kHz, 1000kHz

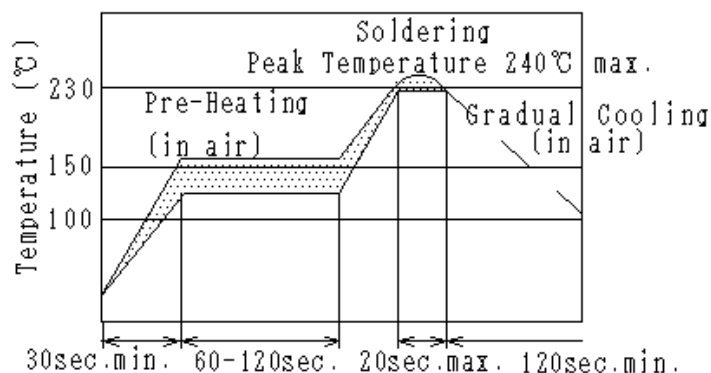


$\phi A$	$\phi B$	W	T	Carrier tape size
$330 \pm 3$	80min	24.5min	30.4max	24

Dimensions: mm



## REFLOW PROFILE:



1. Pre-heating conditions shall be  $140$  to  $160^\circ\text{C}$  for 60 to 120 seconds. Ascending time up to  $150^\circ\text{C}$  shall be longer than 30 seconds.
2. Heating conditions shall be within 20 seconds at  $230^\circ\text{C}$  min., but peak temperature shall be lower than  $240^\circ\text{C}$ .

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