



Leaded Ceramic Resonator 2 Lead Package

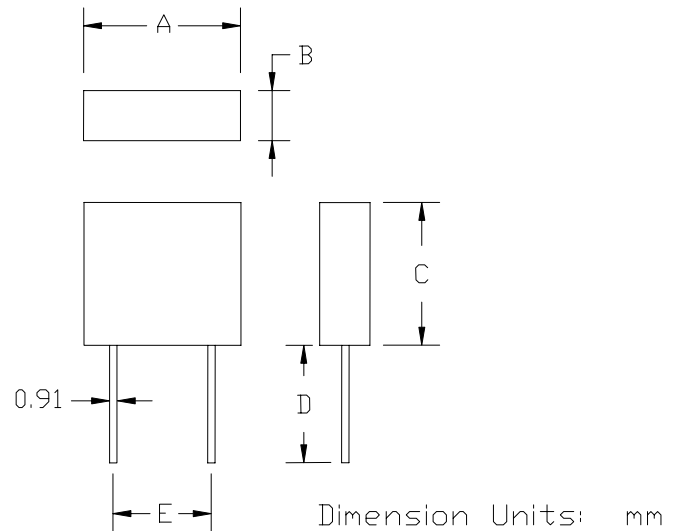
ZTB Series

Frequency Range	190 KHz to 1600 KHz
Frequency Tolerance	See Table
Frequency Stability over Temperature	±0.3%
Aging	±0.3% Max. for 10 Years
Temperature	
Operating	-20° C to +80° C Standard
Storage	-40° C to +85° C Standard
Environmental	See Appendix B for information
Package Information	* MSL = 2a, Termination = e1

* The terminations of the ZTB series ceramic resonator are Pb free. Pb is contained in the ceramic resonator element of this device and is exempted via item 7 of the RoHS annex. This ceramic resonator series is considered RoHS compliant.

Part	Freq. (KHz)	Tolerance	ESR (Ω Max.)	C1 (pF)	C2 (pF)
ZTB-A	190 to 249	±1 KHz	20	330*	470*
ZTB-B	250 to 374	±1 KHz	20	220*	470*
ZTB-C	375 to 429	±2 KHz	20	120*	470*
ZTB-D	430 to 519	±2 KHz	20	100*	100*
ZTB-E	520 to 699	±2 KHz	30	100*	100*
ZTB-F	700 to 999	±0.5%	30	100*	100*
ZTB-G	1000 to 1600	±0.5%	50	100*	100*

* Recommended external capacitance, not internal to the device.



Part	Frequency	Dimension "A"	Dimension "B"	Dimension "C"	Dimension "D"	Dimension "E"
ZTB-A	190 to 250	13.5	3.8	14.7	8.0	10.0
ZTB-B	250 to 375	11.0	3.8	9.3	7.0	7.7
ZTB-C	375 to 430	7.9	3.6	9.3	7.0	5.0
ZTB-D	430 to 520	7.0	3.5	9.0	**	5.0
ZTB-E	520 to 700	7.0	3.5	9.0	**	5.0
ZTB-F	700 to 1000	5.2	2.8	6.8	3.5	2.5
ZTB-G	1000 to 1600	5.2	2.8	6.8	3.5	2.5

** 4.0 or 6.0, contact ILSI America.

Part Number Guide	Sample Part Number: ZTB - D - 455.00	
Part Series	Package Code	Frequency
ZTB -	D	- 455.00 KHz