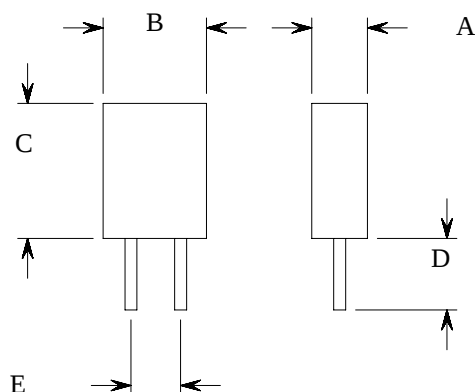


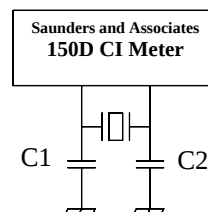
ZTB Series Ceramic Resonator



Marking Guide

Line 1: CQ
Line 2: ZTB
Line 3: Frequency in kHz

Test Circuit



Part Number	Frequency Range (kHz)	Frequency Tolerance	Temperature Characteristics of Oscillation Frequency	Aging Rate (10 yrs.)	Resonant Resistance	C1 (pF)	C2 (pF)	Dimensions (Tolerance: $\pm 0.3\text{mm}$)				
								A	B	C	D	E
ZTBxxxD	190-249	$\pm 1.0\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	20	330	470	3.8	13.5	14.7	8.0	10.0
ZTBxxxD	250-374	$\pm 1.0\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	20	220	470	3.8	11.0	12.2	7.0	7.7
ZTBxxxP	375-429	$\pm 2.0\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	20	120	470	3.6	7.9	9.3	6.0	5.0
ZTBxxxE	430-449	$\pm 2.0\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	20	100	100	3.6	7.9	9.3	5.0	5.0
ZTBxxxE	450-509	$\pm 2.0\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	20	100	100	3.5	7.0	9.0	5.0	5.0
ZTBxxxP	510-699	$\pm 2.0\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	35	100	100	3.5	7.0	9.0	5.0	5.0
ZTBxxxJ	700-999	$\pm 0.5\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	70	100	100	2.2	5.0	6.0	3.5	2.5
ZTBxxxMJ	1000-1250	$\pm 0.5\text{kHz}$	$\pm 0.3\%$	$\pm 0.5\%$	100	100	100	2.2	5.0	6.0	3.5	2.5