

**Low Frequency (KHz) Ceramic Resonators - ZTB Series**

**FEATURES**

- Small and Light
- High Durability
- Good Temperature Stability
- Low Cost

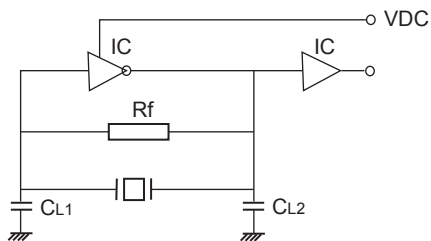
**STANDARD SPECIFICATIONS**

Part Series	Freq. Range (KHz)	Freq. Accuracy (at 25°C)	Freq. Stability over Temperature (-20°C to 80°C)	Aging for 10 Years	ESR (Ohms)	Load Capacitance CL1/CL2
ZTB-A	190 - 249	± 1 KHz	±0.3%	±0.3%	20 Max	330 pF / 470 pF
ZTB-B	250 - 374	± 1 KHz	±0.3%	±0.3%	20 Max	220 pF / 470 pF
ZTB-C	375 - 429	± 2 KHz	±0.3%	±0.3%	20 Max	120 pF / 470 pF
ZTB-D	430 - 519	± 2 KHz	±0.3%	±0.3%	20 Max	100 pF / 100 pF
ZTB-E	520 - 699	± 2 KHz	±0.3%	±0.3%	30 Max	100 pF / 100 pF
ZTB-F	700 - 999	±0.5%	±0.3%	±0.3%	30 Max	100 pF / 100 pF
ZTB-G	1000 - 1250	±0.5%	±0.3%	±0.3%	50 Max	100 pF / 100 pF

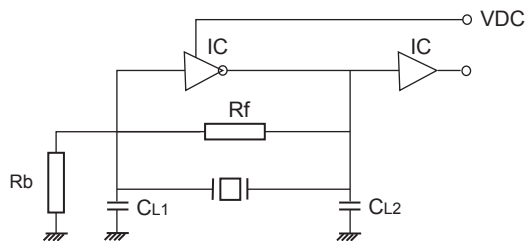
**Part Number Guide:** ZTB-C-Frequency-Others

**Part Number Example:** ZTB-C-380K000

**TEST CIRCUIT**

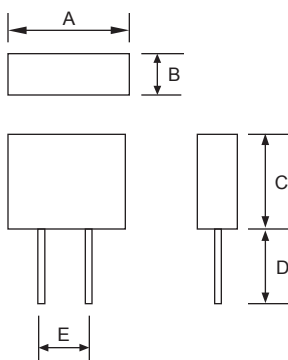


CMOS  
 IC: CD4069UBEX2  
 VDC: +5V  
 Rf: 1 MOhms



TTL  
 IC: TC74HCU04NX2  
 VDC: +5V  
 Rf: 1 MOhms  
 Rb: 2.2 ~ 22 KOhms

**OUTLINE DRAWING**



Frequency Range KHz	A Width	B Thickness	C Height	D Lead Length	E Lead Space
190 ~ 249	13.5	3.8	14.7	8.0	10.0
250 ~ 374	11.0	3.8	12.2	7.0	7.7
375 ~ 400	7.9	3.6	9.3	7.0	5.0
401 ~ 699	7.0	3.5	9.0	4.0(6.0)	5.0
700 ~ 1250	5.2	2.8	6.8	3.5	2.5

All dimensions are typical unless otherwise specified

Dimensions in Millimeters