

The ZTB Series ceramic resonator offers low frequency and extended temperature range capabilities. The ZTBF option is a formed lead version for SMD applications.

FEATURES

- Low frequencies
- Extended temperature range
- High stability

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PART NUMBER *	FREQUENCY RANGE (KHz)	FREQUENCY ACCURACY @ 25°	STABILITY IN TEMPERATURE -20° ~ 80°C (%)	AGING FOR TEN YEARS (%)	RESONANT RESISTANCE (Ω) MAX.	C1 (pF)	C2 (pF)
ZTB□□□D	190 ~ 249	±1.0 KHz	±0.3%	±0.5	20	330	470
ZTB□□□D	250 ~ 374	±1.0 KHz	±0.3%	±0.5	20	220	470
ZTB□□□P	375 ~ 429	±2.0 KHz	±0.3%	±0.5	20	120	470
ZTB□□□E	430 ~ 449	±2.0 KHz	±0.3%	±0.5	20	100	100
ZTB□□□E	450 ~ 509	±2.0 KHz	±0.3%	±0.5	20	100	100
ZTB□□□P	510 ~ 699	±2.0 KHz	±0.3%	±0.5	35	100	100
ZTB□□□J	700 ~ 999	±0.5 %	±0.3%	±0.5	70	100	100
ZTB□□□MJ	1000 ~ 1250	±0.5 %	±0.3%	±0.5	100	100	100

* Complete part number to include frequency i.e. ZTB500E (500 = 500 KHz)

PACKAGE DIMENSIONS (mm)

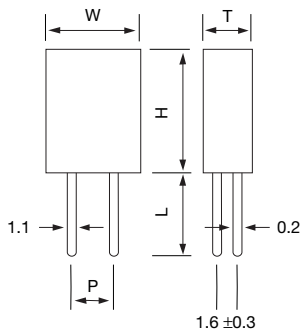


Figure 1) ZTB□□□D, Front and Side views

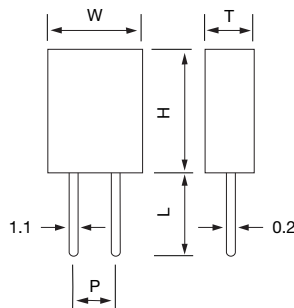


Figure 2) ZTB□□□P, E, J, MJ Front and Side views

FREQ. RANGE (KHz)	DIMENSIONS (mm)				
	W	T	H	P	L
190-249	13.5	3.8	14.7	10.0	8.0
250-374	11.0	3.8	12.2	7.7	7.0

FREQ. RANGE (KHz)	DIMENSIONS (mm)				
	W	T	H	P	L
375-449	7.9	3.6	9.3	5.0	5.0
450-699	7.0	3.5	9.0	5.0	5.0
700-1250	5.0	2.2	6.0	2.5	3.5

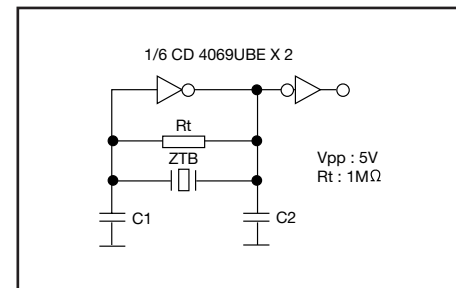


Figure 4) ZTB Test Circuit

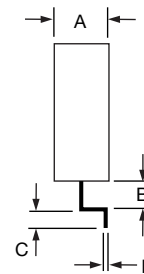


Figure 3) ZTBF (formed lead option) Side views

PART NUMBER	FREQ. RANGE	A	B	C	D
ZTBF□□□P	375-429	3.6±0.5	0.9±0.3	1.5±0.3	0.15±0.05
ZTBF□□□E	430-509	3.5±0.5	0.9±0.3	1.5±0.3	0.15±0.05
ZTBF□□□P	510-699	3.5±0.5	0.9±0.3	1.5±0.3	0.15±0.05
ZTBF□□□J	700-999	2.2±0.5	0.6±0.3	1.0±0.3	0.12±0.05
ZTBF□□□MJ	1000-1250	2.2±0.5	0.6±0.3	1.0±0.3	0.12±0.05