



Ceramic Resonator (KHz)

RoHS Compliant
Directive 2002/95/EC

REACH Compliant
(15 SVHCs)
Regulation (EC)
No. 1907/2006

• Dimension

ZTBF

Freq. (KHz)	ZTBF455E-TF ZTBF500E-TF	ZTBF921.6J-TF ZTBF1.00MJ-TF
Dimension		
A	9.0±0.5	6.0±0.5
B	7.0±0.5	5.9±0.5
C	5.0±0.3	2.5±0.3
D	0.6±0.2	0.6±0.2
E	0.9±0.2	0.8±0.2
F	3.5±0.5	2.2±0.5
G	0.9±0.3	0.6±0.3
H	1.5±0.3	1.9±0.3
J	0.15±0.05	0.12±0.05

Tolerance: ±0.3mm
Unit: mm

ZTB

Freq. (KHz)	ZTB455E ZTB500E	ZTB1.00MJ
Dimension		
A	3.5	2.2
B	7.0	5.0
C	9.0	6.0
D	1.0	0.8
E	5.0	3.5
F	0.6	0.6
G	5.0	2.5
H	0.15±0.05	0.12±0.05

Tolerance: ±0.3mm
Unit: mm

• Electrical Specifications of ZTBF

Part Number	Frequency (KHz)	Frequency Tolerance	Temperature Stability (-20°C~+80°C, %)	Aging Rate (10 years, %)
ZTBF455E-TF	455	±2.0KHz	±0.3	±0.5
ZTBF500E-TF	500	±2.0KHz	±0.3	±0.5
ZTBF921.6J-TF	921.6	±0.5%	±0.3	±0.5
ZTBF1.00MJ-TF	1000	±0.5%	±0.3	±0.5

- For other frequencies or specifications, please consult with our sales representatives for details.

• Electrical Specifications of ZTB

Part Number	Frequency (KHz)	Frequency Tolerance	Temperature Stability (-20°C~+80°C, %)	Aging Rate (10 years, %)
ZTB455E	455	±2.0KHz	±0.3	±0.5
ZTB500E	500	±2.0KHz	±0.3	±0.5
ZTB1.00MJ	1000	±0.5%	±0.3	±0.5

- For other frequencies or specifications, please consult with our sales representatives for details.