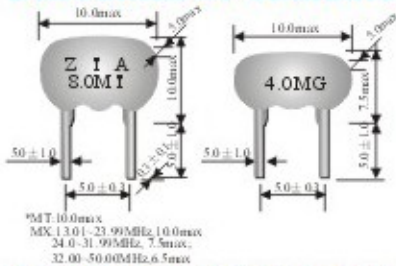


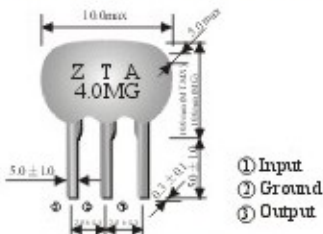
ZTA SERIES OF CERAMIC RESONATOR



TECHNICAL CHARACTERISTICS

Part Number	Frequency Range (MHz)	Frequency Accuracy (25°C) (%)	Stability Temperature (-20°C~85°C) (%)	Operating Temperature (°C)	Aging For Ten Years (%)
ZTA□□□MG	1.80~6.00	±0.5	±0.3	-20~80	±0.3
ZTA□□□MT	6.01~13.00	±0.5	±0.3	-20~80	±0.3
ZTA□□□MX	13.01~50.00	±0.5	±0.3	-20~80	±0.3

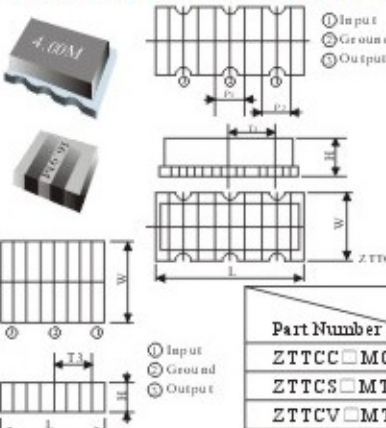
ZTT SERIES OF CERAMIC RESONATOR WITH BUILT-IN CAPACITOR



TECHNICAL CHARACTERISTICS

Part Number	Frequency Accuracy (25°C) (%)	Stability Temperature (-20°C~85°C) (%)	Aging For Ten Years (%)
ZTT1.80~6.00MG	±0.5	±0.3	±0.3
ZTA□□□MT	±0.5	±0.3	±0.3
ZTA□□□MX	±0.5	±0.3	±0.3

ZTACC/CS/CV□MG/MT/MX ZTTCC/CS/CV□MG/MT/MX Series of Ceramic Resonator (Chip type)



TECHNICAL CHARACTERISTICS

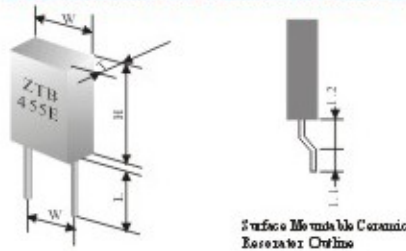
Part Number	Frequency Range (MHz)	Frequency Accuracy (%)	Stability in Temperature (-20°C~85°C) (%)	Aging For Ten Years (%)
ZTACC□MG ZTTCC□MG	2.00~6.99	±0.5	±0.3	±0.3
ZTACC/CS/CV□MT/MX ZTTCC/CS/CV□MT/MX	7.00~13.00	±0.5	±0.4	±0.3
ZTCC/CS/CV□MT/MX	13.01~50.00		±0.3	

Part Number	Code	Dimensions (mm)								
		L	W	H	P1	P2	T1	T2	T3	W1
ZTTCC□MG		7.4±0.3	3.4±0.3	1.8±0.3	1.2±0.3	1.2±0.3	1.5±0.3	1.7±0.3	2.5±0.3	4.0±0.3
ZTTCS□MT/MX		4.7±0.2	4.1±0.2	1.6±0.3	1.0±0.4	0.8±0.4	1.3±0.2	0.8±0.2	1.95±0.2	5.1±0.2
ZTTCV□MT/MX		3.7±0.2	3.1±0.2	1.2±0.3	0.9±0.3	0.7±0.3	1.0±0.2	0.7±0.2	1.5±0.2	4.1±0.2

Note: No middle terminal for ZAT series

ZTTCS/CV□MT/MX

ZTB SERIES OF CERAMIC RESONATOR ZTB□Y KHZ SERIES SURFACE MOUNTABLE CERAMIC RESONATOR



Frequency Range	Width (mm)	Thickness (mm)	Height (mm)	Lead Space (mm)	Lead Length (mm)
190~249	13.5	3.8	14.7	10	8
250~374	11	3.8	12.2	7.7	7
375~400	7.9	3.6	9.3	5	7.7
401~699	7.0	3.5	9	5	4(6)
700~1250	5.2	2.8	6.8	2.5	3.5(5)
1000J	5.1	2.3	6.3	2.5	4

TECHNICAL CHARACTERISTICS

Part Number	Frequency Accuracy	Resonant Impedance	Stability Temperature	Aging For Ten years	Load Capacitance (pF)	
					C1	C2
ZTB190~249D	±1KHz	≤20	±0.3	±0.3	330	470
ZTB250~374D	±1KHz	≤20	±0.3	±0.3	220	470
ZTB375~429P	±2KHz	≤20	±0.3	±0.3	120	470
ZTB430~509E	±2KHz	≤20	±0.3	±0.3	100	100
ZTB510~699P	±2KHz	≤30	±0.3	±0.3	100	100
ZTB700~999J	±0.5%	≤70	±0.3	±0.3	100	100
ZTB1000~1250J	±0.5%	≤100	±0.3	±0.3	100	100

After Lead Forming, The Part Number Change into ZTB375~1250Y