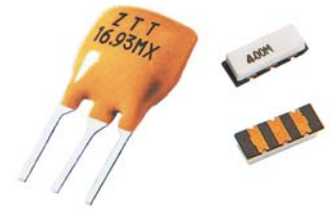




ZTT Series, With built-in Capacitor, Dip and CHIP Type

SCOPE

This specification relates to piezoelectric ceramic resonator to be used in a clock generating circuit for microprocessors.



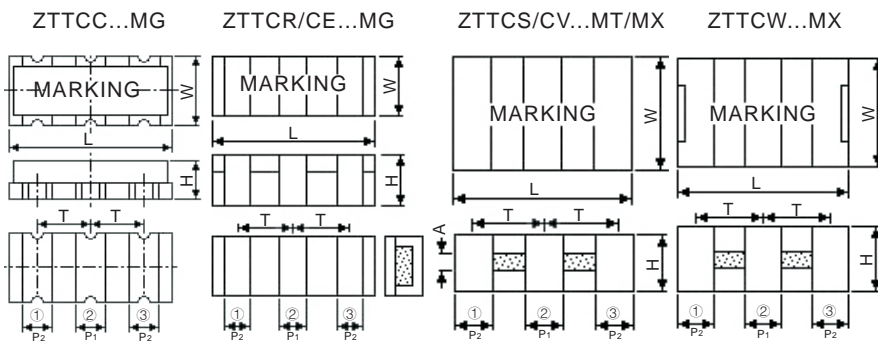
TECHNICAL CHARACTERISTICS FOR DIP TYPE

Part Number	Frequency Range(MHz)	Frequency Accuracy (25°C)	Stability in Temperature (-20~+80°C)	Operating Temperature (°C)	Aging for Ten Years
ZTT...MG	1.80~6.00	±0.5%	±0.3%	-20~+80	±0.3%
ZTT...MT	6.01~13.00	±0.5%	±0.3%	-20~+80	±0.3%
ZTT...MX	13.01~50.00	±0.5%	±0.3%	-20~+80	±0.3%

TECHNICAL CHARACTERISTICS FOR CHIP TYPE

Part Number	Frequency Range(MHz)	Frequency Accuracy (25°C)	Stability in Temperature (-20~+80°C)	Operating Temperature (°C)	Aging for Ten Years
ZTTCC...MG	2.00~8.00	±0.5%	±0.3%	-20~+80	±0.3%
ZTTCR...MG	4.00~8.00	±0.5%	±0.3%	-20~+80	±0.3%
ZTTCS/CV...MT	7.00~13.00	±0.5%	±0.4%	-20~+80	±0.3%
ZTTCE...MG	8.00~12.00	±0.5%	±0.3%	-20~+80	±0.3%
ZTTCS...MX	13.01~50.00	±0.5%	±0.3%	-20~+80	±0.3%
ZTTCV...MX	16.00~50.00	±0.5%	±0.3%	-20~+80	±0.3%
ZTTCW...MX	20.00~50.00	±0.5%	±0.3%	-20~+80	±0.3%

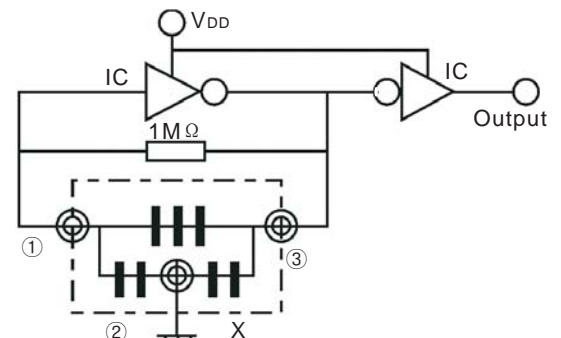
DIMENSIONS AND TEST CIRCUIT FOR MOISIC



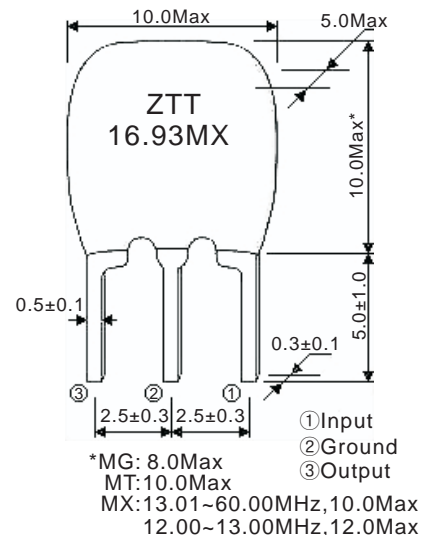
① Input ② Ground ③ Output

Note: A stands for thickness of the ceramic element, which varies with the frequency. The range of the thickness is 0.1 to 0.7mm.

Code Part Number	Dimensions(mm)					
	L	W	H	P1	P2	T
ZTTCC...MG	7.4±0.2	3.4±0.2	1.8±0.2	1.2±0.2	1.2±0.2	2.5±0.2
ZTTCR...MG	4.5±0.2	2.0±0.2	1.2Max	0.8±0.2	0.8±0.2	1.5±0.2
ZTTCE...MG	3.2±0.2	1.3±0.2	1.0Max	0.4±0.2	0.4±0.2	1.2±0.2
ZTTCS...MT/MX	4.7±0.2	4.1±0.2	(1.2+A)±0.2	1.0±0.2	0.8±0.2	1.95±0.2
ZTTCV...MT/MX	3.7±0.2	3.1±0.2	(1.0+A)±0.2	0.9±0.2	0.7±0.2	1.5±0.2
ZTTCW...MX	2.5±0.2	2.0±0.2	1.5Max	0.5±0.2	0.4±0.2	1.0±0.2



IC(MG,MT):1/6TC4069UBPx2
(MX):1/6TC74HCU04x2
X: Ceramic Resonator



*MG: 8.0Max
MT: 10.0Max
MX: 13.01~60.00MHz, 10.0Max
12.00~13.00MHz, 12.0Max