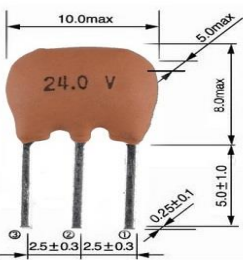


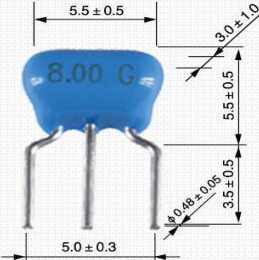
ZTT - DIP Series of Ceramic Resonator

1.79 - 60.00MHz

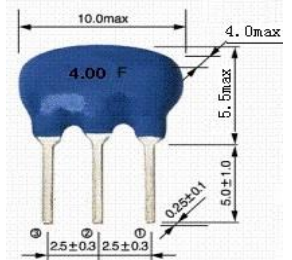
ZTTLS □ MT, MX Series



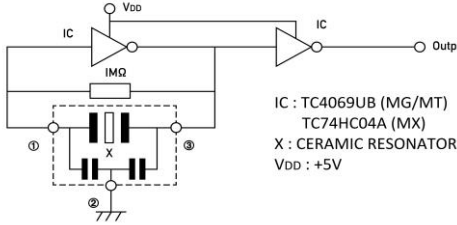
ZTTRS □ MG, MX Series



ZTTWS □ MG Series



● TEST CIRCUIT FOR MOS IC



● TECHNICAL CHARACTERISTICS

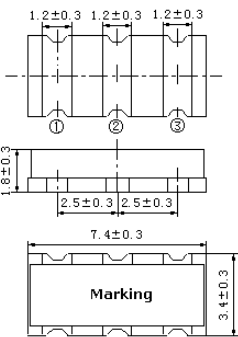
Part Number	Frequency Range (MHz)	Frequency Accuracy (25°C)	Stability Temperature (-20~+80°C) max.(%)	Operating Temperature (°C)	Aging For Ten Year (%)
ZTTLS □ MT	6.00 - 13.00	±0.5	±0.3	-25 ~ +85	±0.3
ZTTLS □ MX	12.00 - 60.00	±0.5	±0.3	-25 ~ +85	±0.3
ZTTRS □ MG	8.00 - 12.50	±0.5	±0.3	-25 ~ +85	±0.3
ZTTWS □ MG	1.79 - 6.00	±0.5	±0.3	-25 ~ +85	±0.3

ZTT - SMD Series of Ceramic Resonator

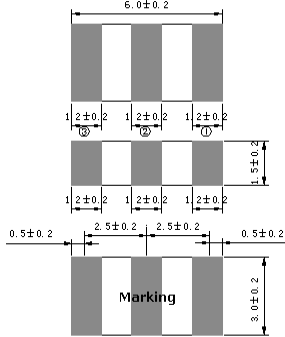
1.80 - 60.00MHz

● DIMENSIONS (UNIT : mm)

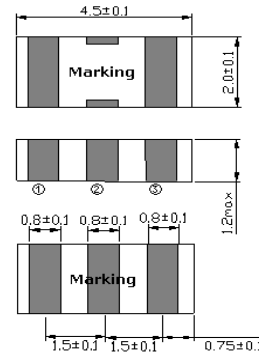
ZTCC □ MG Series



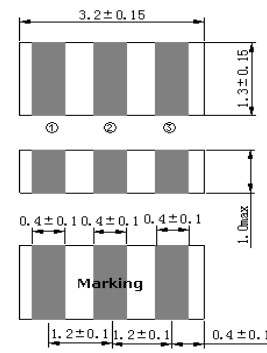
ZTCP □ MG Series



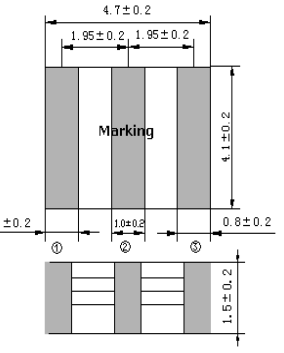
ZTCR □ MG Series



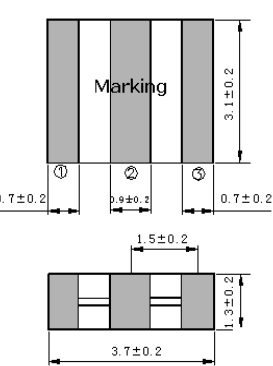
ZTCE □ MG Series



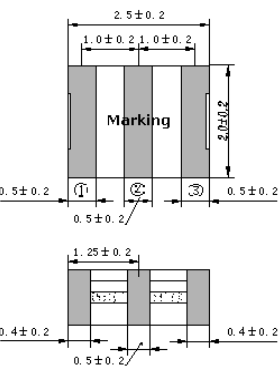
ZTCS □ MT/MX Series



ZTCV □ MT/MX Series

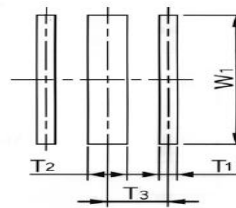


ZTCW □ MX Series



● RECOMMENDED LAND PATTERN

- ① Input
- ② Ground
- ③ Output



Part Number	Size Code	DIMENSIONS (UNIT : mm)			
		T1	T2	T3	W1
ZTCC □ MG		1.2±0.2	1.2±0.2	2.5±0.2	3.4±0.2
ZTCP □ MG		1.2±0.2	1.2±0.2	2.4±0.2	3.0±0.2
ZTCR □ MG		0.8±0.2	0.8±0.2	1.5±0.2	2.0±0.2
ZTCE □ MG		0.4±0.2	0.4±0.2	1.2±0.2	1.3±0.2
ZTCS □ MT/MX		0.8±0.2	0.8±0.2	1.95±0.2	4.1±0.2
ZTCV □ MT/MX		0.7±0.2	0.7±0.2	1.5±0.2	3.1±0.2
ZTCW □ MX		0.4±0.2	0.4±0.2	1.0±0.2	2.0±0.2

● TECHNICAL CHARACTERISTICS

Part Number	Frequency Range (MHz)	Frequency Accuracy (25°C)	Stability Temperature (-20~+85°C) max. (%)	Operating Temperature (°C)	Aging For Ten Year (%)
ZTCC □ MG	1.80 - 8.00	±0.5	±0.3	-25 ~ +85	±0.3
ZTCP □ MG	2.00 - 12.00	±0.5	±0.2	-40 ~ +125	±0.1
ZTCR □ MG	4.00 - 8.00	±0.5	±0.3	-25 ~ +85	±0.3
ZTCE □ MG	8.00 - 16.00	±0.5	±0.3	-40 ~ +85	±0.3
ZTCS □ MT	6.00 - 13.00	±0.5	±0.4	-25 ~ +85	±0.3
ZTCV □ MT	8.00 - 13.00	±0.5	±0.4	-25 ~ +85	±0.3
ZTCS □ MX	13.01 - 60.00	±0.5	±0.3	-25 ~ +85	±0.3
ZTCV □ MX	16.00 - 60.00	±0.5	±0.3	-25 ~ +85	±0.3
ZTCW □ MX	20.00 - 60.00	±0.5	±0.3	-25 ~ +85	±0.3