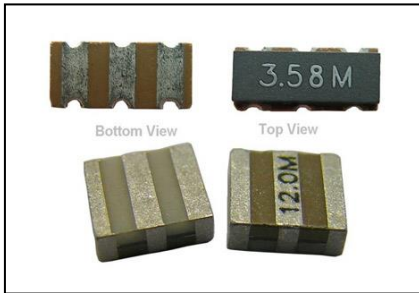


## ZTACC, CS, CV, CW & ZTTCC, CE, CS, CV, CW Series 2.00 to 50.0MHz



The ceramic resonator has a wide frequency range and small footprint to meet further downsizing and high density mounting requirements. Typical applications include TVs, VCRs, automotive electronic devices, telephones, copiers, cameras, voice synthesizers, communication equipment, remote controls and toys.

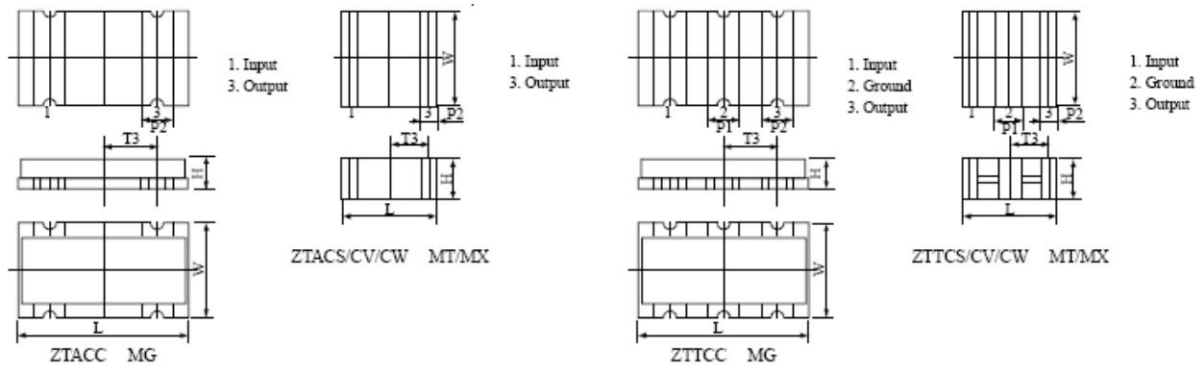
### FEATURES

- Lower Cost
- Good Stability
- Wide Frequency Range
- Small compact size

### Electrical Specifications

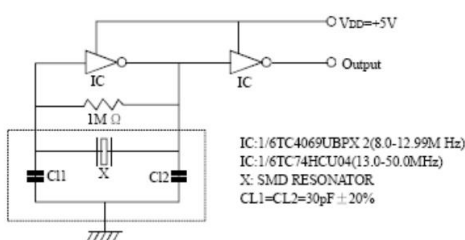
Parameter	ZTACC/ZTTCC	ZTA&ZTTCS/CV-MT	ZTA&ZTTCS/CV-MX	ZTA&ZTTCCW-MX	ZTTCE
Frequency Range (MHz)	2.00 to 6.99	7.00 to 12.99	13.00 to 50.00	20.00 to 50.00	8.00 to 12.00
Frequency Accuracy (at 25°C) (%)	±0.5	±0.5	±0.5	±0.5	±0.5
Temperature Stability (-20°C to +80°C) (%)	±0.3	±0.4	±0.4	±0.3	±0.3
Aging for ten years (%)	±0.3	±0.3	±0.3	±0.3	±0.3
Resonator Resistance (Ω) Max	80	30	35	35	35
Withstanding Voltage (5 seconds Max)	100V <sub>DC</sub>	100V <sub>DC</sub>	100V <sub>DC</sub>	100V <sub>DC</sub>	100V <sub>DC</sub>
Insulation Resistance Minimum (at 10V <sub>DC</sub> )	5 x 10 <sup>8</sup> Ω	5 x 10 <sup>8</sup> Ω	5 x 10 <sup>8</sup> Ω	5 x 10 <sup>8</sup> Ω	5 x 10 <sup>8</sup> Ω

### Mechanical Dimension



Parameter	Dimensions								
	L	W	H	P1	P2	T1	T2	T3	W1
ZTACC, 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	3.0±0.3
ZTACS-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	0.8±0.2	5.1±0.2
ZTACV-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
ZTACW,ZTTCCW-MT/MX	2.5±0.2	2.0±0.2	1.5±0.2	0.4±0.2	0.4±0.2	0.5±0.2	0.5±0.2	1.0±0.2	2.6±0.2
ZTTCE	3.2±0.2	1.3±0.2	1.0±0.1	0.5±0.2	0.5±0.2	0.4±0.2	0.4±0.2	1.2±0.2	1.3±0.2

### Test Circuit for MOS IC



### Recommended Solder Pattern

