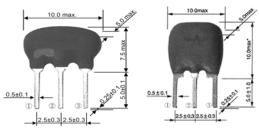
# Ceramic Resonator (ZTT/ZTTCC/ZTTCR/ZTTCE/ZTTCV/ZTTCW Series)

# ZTT Series of Ceramic Resonator

1.80 - 50.00MHz



ZTTx.xxMG Series ZTTxx.xxMT Series

# IC: TC4069UB (MG,MT) TC74HCU04A (MX) X : Ceramic Resonator <del>┨</del>┠┋╂┠ J. 2

## TECHNICAL CHARACTERISTICS

TEST CIRCUIT FOR MOS IC

Part Number	Ferquency Range	Ferquency	Stability Temperature	Operating	Aging For Ten
Part Number	(MHz)	Accuracy (25°C)	(-20 ~ +80°C) max.(%)	Temperature (°C)	Year (%)
ZTTMG	1.80 - 6.00	±0.5	±0.3	- 25 ~ +85	±0.3
ZTT	6.00 - 13.00	±0.5	±0.3	- 25 ~ +85	±0.3
ZTT	13.01 - 50.00	±0.5	±0.3	- 25 ~ +85	±0.3
ZTTRSMG	6.00 - 12.50	±0.5	±0.3	- 25 ~ +85	±0.3
ZTTRSMX	16.00 - 50.00	±0.5	±0.3	- 25 ~ +85	±0.3
ZTTWSMG	1.80 - 6.00	±0.5	±0.3	- 25 ~ +85	±0.3

# 25±0.3 2.5±0.3

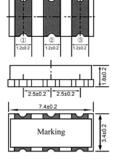
# ZTT - SMD Series of Ceramic Resonator

ZTTWSx.xxMG Series

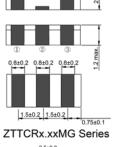
1.80 - 50.00MHz

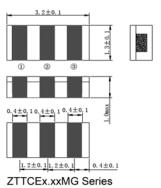
## DIMENSIONS

ZTTRSxx.xxMG,MX Series

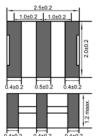


ZTTCCx.xxMG Series





1 Input 2 Ground 3 Output

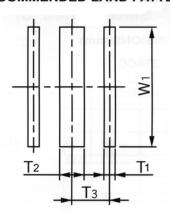


ZTTCWxx.xxMX Series

ZTTCSxx.xxMT,MX Series ZTTCVxx.xxMT,MX Series

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

## RECOMMENDED LAND PATTERN



Size Code		Dimernsi	ons (mm)	
Part Number	T1	T2	T3	W1
ZTTCC MG	1.5±0.3	1.7±0.3	2.5±0.3	4.0±0.3
ZTTCR MG	0.8±0.2	0.8±0.2	1.5±0.2	2.6±0.2
ZTTCEMG	0.4±0.2	0.4±0.2	1.2±0.2	2.0±0.2
ZTTCS MT/MX	0.8±0.2	1.3±0.2	1.95±0.2	5.1±0.2
ZTTCV MT/MX	0.7±0.2	1.0±0.2	1.5±0.2	4.1±0.2
ZTTCWMX	0.5±0.2	0.5±0.2	1.0±0.2	2.6±0.2

## TECHNICAL CHARACTERISTICS

Part Number	Ferquency Range	Ferquency	Stability Temperature	Operating	Aging For Ten	
	(MHz)	Accuracy (25°C)	(-20 ~ +80°C) max.(%)	Temperature (°C)	Year (%)	
ZTTCCMG	2.00 - 8.00	±0.5	±0.3	- 25 ~ +85	±0.3	
ZTTCR MG	4.00 - 8.00	±0.5	±0.3	- 25 ~ +85	±0.3	
ZTTCEMG	8.00 - 12.00	±0.5	±0.3	- 25 ~ +85	±0.3	
ZTTCSMT	6.00 - 13.00	±0.5	±0.3	- 25 ~ +85	±0.3	
ZTTCVMT	6.00 - 13.00	±0.5	±0.3	- 25 ~ +85	±0.3	
ZTTCS MX	13.01 - 50.00	±0.5	±0.3	- 25 ~ +85	±0.3	
ZTTCVMX	16.00 - 50.00	±0.5	±0.3	- 25 ~ +85	±0.3	
ZTTCWMX	20.00 - 50.00	±0.5	±0.3	- 25 ~ +85	±0.3	