

## VC-T1/T3 Series

1.0 to 54.0MHz



VCXO is a Voltage Controlled Crystal Oscillator.

This type of oscillator is a full size tri-state Enable/Disable control. The metal package with pin #4 case ground acts as shielding to minimize EMI radiation.

### FEATURES

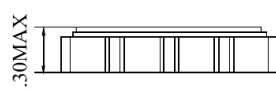
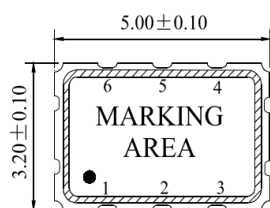
- Miniature Package
- Industry Standard
- Tape and Reel
- RoHS meet

### Electrical Specifications

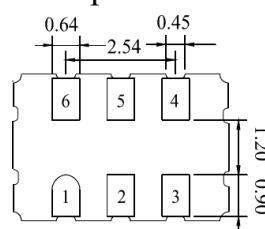
Parameter	Symbol	Condition	VC-T1	VC-T3
Frequency Range	$F_0$		1.0 to 54.0MHz	
Frequency Calibration		At 25°C	±15PPM	
Frequency Stability *		All Condition *	±15PPM, ±25PPM, ±50PPM	
Stability vs. Power Change		$V_{DD} \pm 5\%$	±5PPM	
Stability vs. Load Change		15pF±10%	±3PPM	
Pullability Over Control Voltage Range			±50PPM, ±100PPM, ±200PPM	
Power Supply Voltage	$V_{DD}$		5.0V±10%	3.3V±10%
Control Voltage Range			0.5 ~ 4.5V	0 ~ 3.3V
Operating Temperature Range	$T_{OPR}$		0°C to 70°C (-40°C to 85°C option)	
Storage Temperature Range	$T_{STG}$		-55°C to 125°C	
Aging (first year)		25°C ± 3°C	± 5PPM	
Supply Current	$I_{DD}$		30mA Max	
Output Symmetry	Sym	$\frac{1}{2} V_{DD}$	40/60% (45/55% option)	
Rise Time	$T_r$	10% $V_{DD}$ to 90% $V_{DD}$	10ns Max	8ns Max
Fall Time	$T_f$	90% $V_{DD}$ to 10% $V_{DD}$	10ns Max	8ns Max
Output Voltage	$V_{OH}$		90% $V_{DD}$ Min	
	$V_{OL}$		10% $V_{DD}$ Max	
Output Load			15pF Max	
Startup Time	$T_S$		10ms Max	

\* Include 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

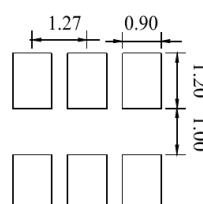
### Mechanical Dimensions – mm (inch)



### Top View



### Recommended Solder Pattern



Pin	Connection
1	Vcontrol
2	Tri-state
3	GND
4	Output
5	N.C.
6	$V_{DD}$