VC-61/63 Series 1.0 to 150MHz

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 #7 case ground acts as shielding to minimize EMI radiation.

FEATURES

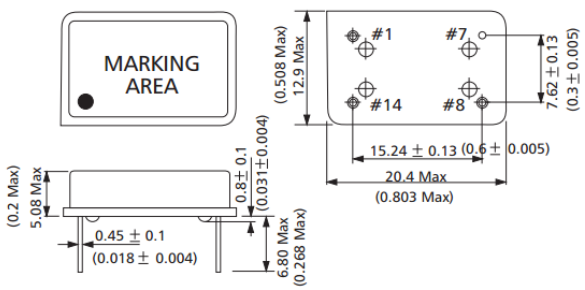
- 14 Pin Full size
- Industry Standard
- Wide Frequency Range
- Low Cost

Electrical Specifications

Parameter	Symbol	Condition	VC-61	VC-63
Frequency Range	F_0		1.0 to 150.0MHz	
Frequency Calibration		At 25ºC	±15PPM	
Frequency Stability *		All Condition *	±15PPM, ±25PPM, ±50PPM	
Stability vs. Power Change		V_{DD}±5%	±5PPM	
Stability vs. Load Change		15pF±10%	±3PPM	
Pullability Over Control Voltage Range			±50PPM, ±100PPM, ±200PM	
Power Supply Voltage	V_{DD}		5.0V±10%	3.3V±10%
Control Voltage Range			0.5 ~ 4.5V	0 ~ 3.3V
Operating Temperature Range	TO_{PR}		0ºC to 70ºC (-40ºC to 85ºC option)	
Storage Temperature Range	T_{STG}		-55ºC to 125ºC	
Aging (first year)		25ºC ± 3ºC	± 5PPM	
Supply Current	I_{DD}	1.0 to 19.999MHz	20mA Max	10mA Max
		20.0 to 44.999MHz	30mA Max	18mA Max
		45.0 to 124.999MHz	40mA Max	20mA Max
		125.0 to 150.0MHz	50mA Max	25mA Max
Output Symmetry	Sym	½ 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	

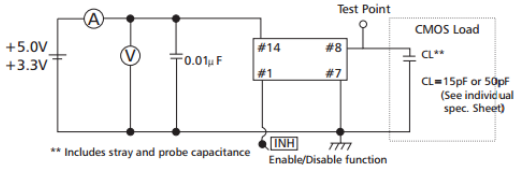
* Include 25ºC tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

Mechanical Dimensions – mm (inch)

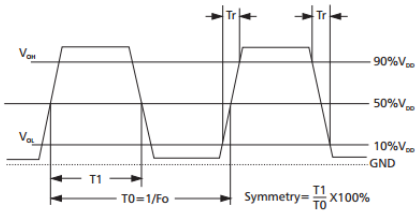


Pin	Connection
1	Vcontrol
7	GND
8	Output
14	V_{DD}

HCMOS Test Circuit



HCMOS Output Waveform



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