

## • VCXO-F1 & F3 Series

### FEATURES

- 14 Pin Full Size
- Industry Standard
- Wide Frequency Range
- Low Cost
- Resistance Weld Package
- 3.3V available

The VCXO-F1 & VCXO-F3 series is full size voltage controlled crystal oscillator designed primarily for use in phase locked loops, phase shift keying and other telecommunication applications such as ADSL, Cable modem etc. VCXO-F1 is 5V power supply and VCXO-F3 is 3.3V power supply.



### ELECTRICAL SPECIFICATIONS

Parameter	Condition	VCXO F1	VCXO F3
Frequency Range*	Fo	1MHz~40.00MHz	1MHz~40.00MHz
Frequency Calibration	At 25°C	±1.5ppm	
Temperature Stability	Over T <sub>OPR</sub>	±1.5ppm, ±2.5ppm, ±5.0ppm	
Stability vs. Power change	V <sub>DD</sub> ±1-5%	±5ppm	
Stability vs. Load change	15pF ±10%	±3ppm	
Pullability	Over Control Voltage Range	±50ppm, ±100ppm, ±200ppm	±50ppm, ±100ppm, ±150ppm
Control Voltage Range		0.5~4.5V	0~3.3V
Operating Temperature Range	T <sub>OPR</sub>	0°C~70°C (-40°C~+85°C option)	
Storage Temperature Range	T <sub>STG</sub>	-55°C~+125°C	
Power Supply Voltage	V <sub>DD</sub>	5.0V ±1-5%	3.3V ±1-5%
Aging (First Year)	25°C ±3°C	±5ppm	
Supply Current	I <sub>DD</sub>	1.000MHz to 23.999MHz 24.000MHz to 40.000MHz	10mA Max 20mA Max
Output Symmetry	Sym	At 1/2V <sub>DD</sub> 40/60% (45/55% Option)	
Rise Time	T <sub>r</sub>	20%V <sub>DD</sub> ~80%V <sub>DD</sub>	10nS Max 8nS Max
Fall Time	T <sub>f</sub>	80%V <sub>DD</sub> ~20%V <sub>DD</sub>	10nS Max 8nS Max
Output Voltage	V <sub>OH</sub>	90%V <sub>DD</sub> min	
	V <sub>OL</sub>	10%V <sub>DD</sub> min	
Output load		15pF max	
Start-up Time	T <sub>s</sub>	10mS Max	

\*Frequency over 40.000MHz, please consult factory.

### DIMENSIONS

Unit: mm

