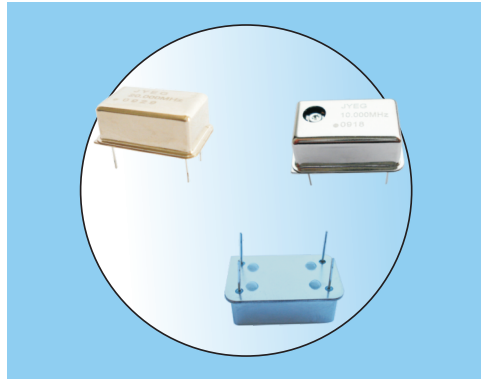


Crystal Oscillators

Temperature Compensated Crystal Oscillator / TCXO-14



Features

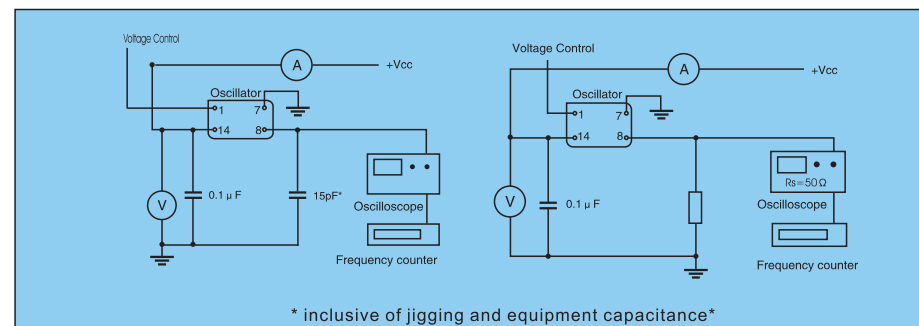
- JYEG part number: JYTC14
- Wide Frequency Range up to 125MHz
- Low Aging
- Sine Wave, HCMOS, LVCMOS
- APPLICATIONS:
SDH/SONET, ATM, WLL
Measurement Equipment

TYPICAL SPECIFICATIONS

Type	TC14
Frequency Range	2~125MHz
Frequency Stability vs. Temperature (FST)	$\pm 1.0\text{ppm}(0^{\circ}\text{C}\sim+50^{\circ}\text{C})$
	$\pm 1.5\text{ppm}(0^{\circ}\text{C}\sim+70^{\circ}\text{C})$
	$\pm 2\text{ppm}(-20^{\circ}\text{C}\sim+70^{\circ}\text{C})$
	$\pm 2.5\text{ppm}(-30^{\circ}\text{C}\sim+75^{\circ}\text{C})$
	$\pm 3.0\text{ppm}(-40^{\circ}\text{C}\sim+85^{\circ}\text{C})$
Initial Frequency	Max. $\pm 1.0\text{ppm}$
Aging	Max. $\pm 1\text{ppm}/\text{Year}$
Output Type and Load Characteristics	See Table1
Frequency Stability vs Load	$\pm 0.3\text{ppm max. vs } \pm 10\%\text{load change}$
Supply Voltage	+3.3 VDC, +5.0VDC
Frequency Stability vs Voltage	$\pm 0.2\text{ppm max. vs } \pm 5\%\text{voltage change}$
Phase Noise(10MHZ)	10Hz, -80dBc/Hz
	100Hz, -110dBc/Hz
	1kHz, -140dBc/Hz
	10kHz, -150dBc/Hz
	100kHz, -150dBc/Hz
Supply Current	< 40MHz, 25mA(max)
	$\geq 40\text{MHz}$, 40mA(max)
Storage Temperature Range	$-40^{\circ}\text{C}\sim+100^{\circ}\text{C}$

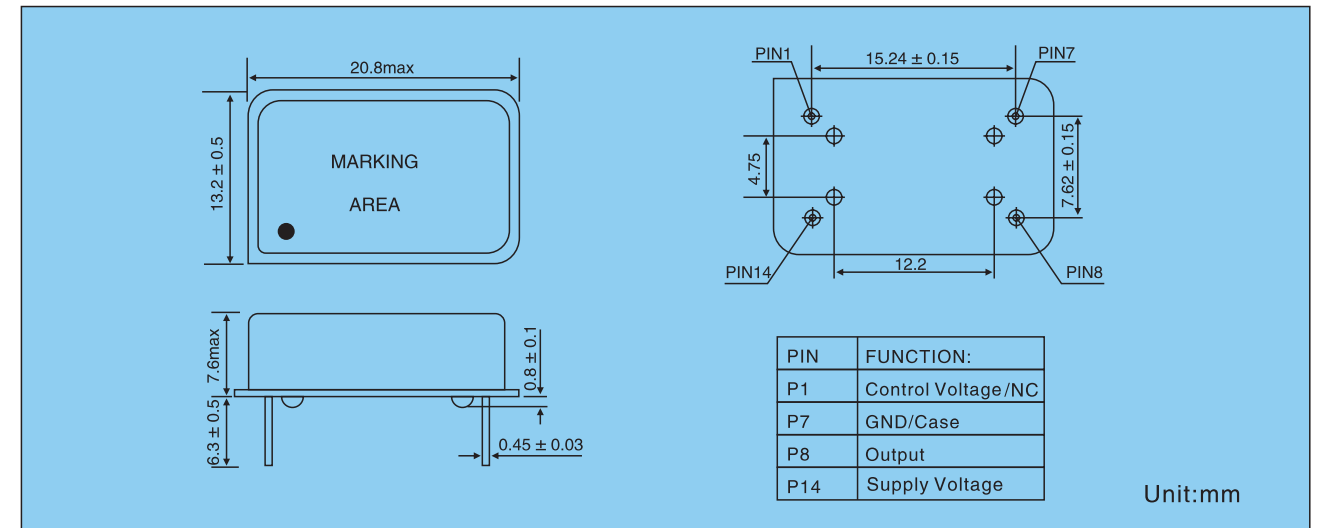
Test Circuit-CMOS

Test Circuit- Sine Wave



Crystal Oscillators

TCXO-14



OUTPUT TYPE AND LOAD CHARACTERISTICS TABLE1

Output Waveform	Sine Wave
Output Characteristics	Load: Nominal 50 Ω Output level: > 5dBm Harmonic Suppression: < -25dB

Output Waveform	HCMOS/LVCMOS
Output Characteristics	Load: 15pF typical, 50pF available "1" level: > 0.9VDD; "0" level: < 0.1VDD Duty cycle: 40/60