


OCXO (Oven Controlled Crystal Oscillators) OC14T33C, OC14T33I Stratum 3, OC14T33GC, OC14T33GI (RoHS compliant)	+ 3.3 V HCMOS Square		MERCURY Since 1973
---	---------------------------------------	---	------------------------------

- For high stability Stratum 3 applications requiring low jitter and tight stability. $< \pm 4.6$ ppm overall frequency tolerance over 15 years
- +3.3 V D.C supply Voltage
- 15 pF load HCMOS square wave output
- Full size 4 pin DIP full metal package




General Specifications (10 MHz at +25°C, at +3.3 V Vcc and Vcon=0.0V)

Output Wave Form		HCMOS Square Wave. Wave form code is "T"				
Models		Commercial Temperature Range		Industrial Temperature Range		
		"C": 0°C to +70°C		"I": -40°C to +85°C		
		OC14T33C OC14T33GC (RoHS compliant)		OC14T33I OC14T33GI (RoHS compliant)		
Frequency Range		1.25 MHz ~40.0 MHz.				
Supply Voltage (Vcc)		+3.3 V ± 0.2 V (voltage code is "33")				
Initial Calibration Tolerance		± 1.0 ppm max. at time of shipment.				
Total Frequency Tolerance		± 4.6 ppm max. Frequency Stability overall included long term aging 15 years ± 0.28 ppm max. Holdover stability during 24 hours inclusive of load, change supply voltage change and temperature variation.				
Frequency Stability		± 0.25 ppm max.				
Aging		± 30 ppb max. /day; ± 2.5 ppm max over 15 years.				
Warm-up time (at +25°C)		3 minutes max. Within ± 0.1 ppm of its reference frequency.				
Voltage Control on pin 1 (EFC) (Electronics Frequency Tuning)		Not applicable. Pin 1 must be connected to ground.				
Power	Power Dissipation (at +25°C)	1.5 Watts max. at steady-state. 2.5 Watts max. at turn-on.				
Output	Load (Fan Out)	10 LS or 47 pF max.				
	Duty Cycle (measured at 1/2Vcc)	50% $\pm 5\%$				
	Output Voltage Logic High (V_{OH})	+2.8 V min				
	Output Voltage Logic Low (V_{OL})	+0.4 V max.				
	Rise and Fall Time	7 nS max. (measured at 20% \rightleftharpoons 80% of waveform.)				
	Phase Noise	Offset	1 Hz	10 Hz	100 Hz	1 KHz
10 MHz at static condition		-70 dBc	-100 dBc	-130 dBc	-140 dBc	-145 dBc
Storage Temperature		-65°C to +125°C				
Shock		2000 G's, 0.3 ms ½ sine				
Vibration		10 to 2000 Hz / 10 G's				

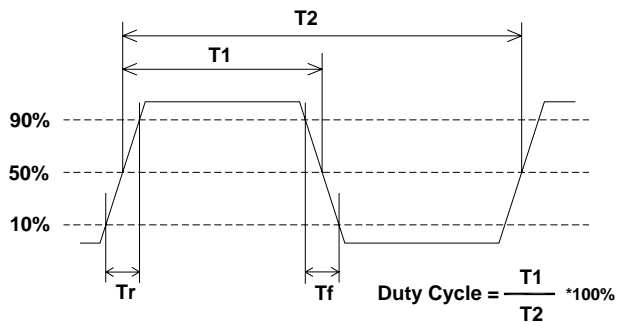
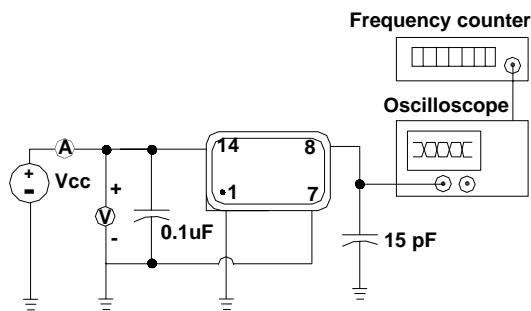
MERCURY www.mercury-crystal.com

Taiwan: TEL (886)-2-2406-2779, FAX (886)-2-2496-0769, e-mail: sales-tw@mercury-crystal.com

U.S.A.: TEL (1)-909-466-0427, FAX (1)-909-466-0762, e-mail: sales-us@mercury-crystal.com

OCXO (Oven Controlled Crystal Oscillators) OC14T33C, OC14T33I Stratum 3, HCMOS Square Wave OC14T33GC, OC14T33GI (RoHS version)	+3.3 V	 MERCURY Y Since 1973
---	---------------	---

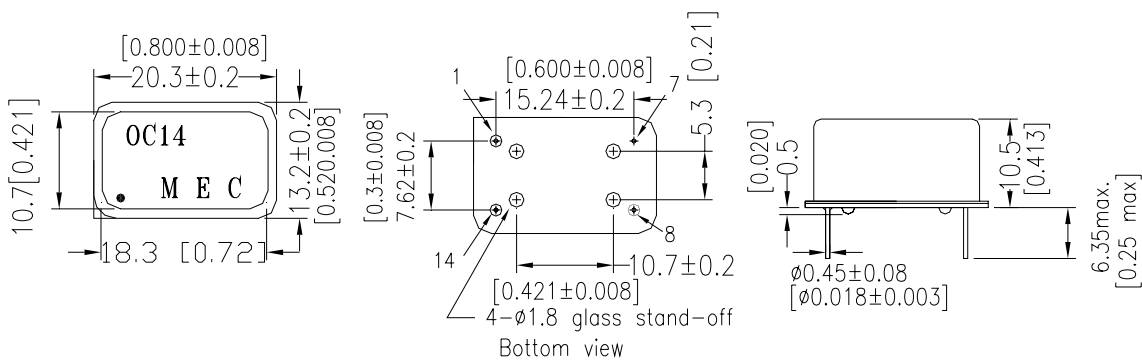
OC14T33 Test Circuit:



OC14T33 Package Dimensions and Pin Connections:

- Pin 1: Ground
- Pin 7: Ground / Case
- Pin 8: RF Output
- Pin 14: Supply Voltage

unit mm [inches]
 Square corner is pin No. 1



Part Number Format and Example:

Example: OC14T33GC-10.000							
OC	14	T	33	G	C	—	10.000
①	②	③	④	⑤	⑥	dash	⑦
<p>①: "OC" Product Prefix for OCXO</p> <p>②: Package type. "14" for 4 pin DIP.</p> <p>③: Output wave form code. "T" for HCMOS square wave.</p> <p>④: Supply voltage code. "33" for +3.3V;</p> <p>⑤: "G" for RoHS compliant equivalent, " " (blank) for non-RoHS part.</p> <p>⑥: "C" for Stratum 3 over 0°C to +70°C ; "I" for Stratum 3 over -40°C to +85°C</p> <p>⑦: Frequency in MHz;</p>							