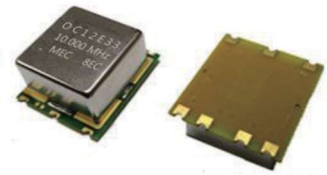


" OCXO " [Oven Controlled Crystal Oscillators]

OC12T Square Wave	OC12E True Sine Wave	Best stability ± 10 ppb	Standard OCXO Series	SMD	3.3V	5.0V	Min. 5 MHz	Max. 40 MHz
-----------------------------	--------------------------------	-----------------------------------	--------------------------------	------------	-------------	-------------	----------------------	-----------------------



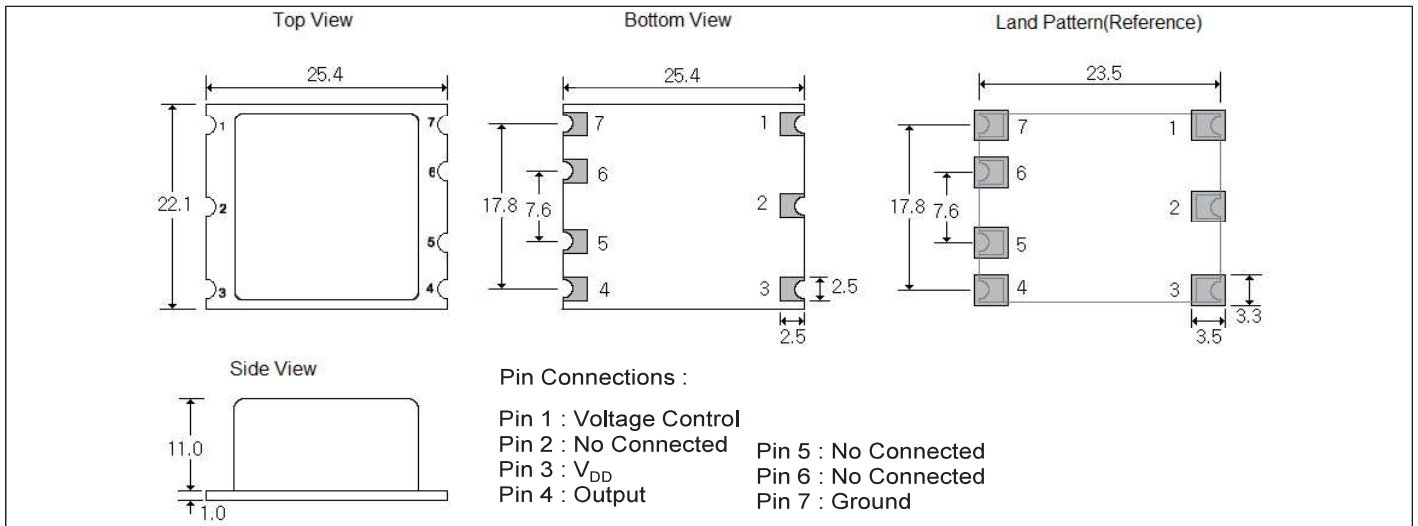
Applications

- OC12_ (25.4 * 22.1 * 11.0 mm)
- +3.3V , +5.0V Supply Voltages
- Voltage control (Electronic Frequency Tuning) is standard .

General Specifications (at+25°C and specified input voltage)

Output Wave Form		Square wave. Wave form code is " T "		True Sine Wave. Wave form code is " E "	
Supply Voltage		+3.3 V	+5.0 V	+3.3 V	+5.0 V
Supply Voltage range , " Voltage code "		+3.3V ± 5% , " 3 "	+5.0V ± 5% , " 5 "	+3.3V ± 5% , " 3 "	+5.0V ± 5% , " 5 "
Frequency Range		5 ~ 40.0 MHz		5 ~ 40.0 MHz	
Initial Calibration Tolerance		± 200 ppb (max.)	± 200 ppb (max.)	± 200 ppb (max.)	± 200 ppb (max.)
		Vcon = +1.65 V	Vcon = +2.5 V	Vcon = +1.65 V	Vcon = +2.5 V
Type of Crystal Cut Used		" SC - cut " crystal or " IT - cut " crystal			
Frequency Stability	vs Temperature (refer to +25°C)	± 5 ppb (max.) over 0°C to +70°C			
		± 10 ppb (max.) over -30°C to +70°C			
		± 10 ppb (max.) over -40°C to +85°C			
	vs Voltage Change	± 0.5 ppb (max.) , for a ± 5% input voltage change .			
	vs Warm-up time (+25°C)	10 minute max. Within ± 10 ppb of its reference frequency.			
	vs Aging	± 0.5 ppb max./after 30 days ; ± 50 ppb max./first year ; ± 400 ppb max. over 10 years.			
Voltage Control	Freq. Deviation Range	± 0.5 ppm min, ±5 ppm max. Reference to fo at +25°C and over operating temperature range.			
On pin 1 (EFC) (Electronic Freq. Tuning)	Control Voltage Range	+1.65V ± 1.65V	+2.5V ± 2.5V	+1.65V ± 1.65V	+2.5V ± 2.5V
	Transfer Function	Positive : Increasing control voltage increases output frequency .			
	Input Impedance	50 K ohms min.			
	EFC Linearity	± 10 % (max.)			
Power	Power Dissipation (at +25°C)	1.2 Watts max. at steady-state; 1000 mA max. at turn-on.			
Output	Output Level (for True Sine)	---	---	+8 dBm (typ.) , +10 dBm (max.)	
	Harmonic (for True Sine)	---	---	-30 dBc (max.)	
	Spurious (for True Sine)	---	---	-60 dBc (max.)	
	Load	15pF		50 Ω	
	Output Logic High (V _{OH})	+2.4 V (min.)	+2.4 V (min.)	---	---
	Output Logic Low (V _{OL})	+ 0.4 V (max.)	+ 0.4 V (max.)	---	---
	Duty Cycle (V _{DD})	50 % ± 5% @ +1.4V			
	Rise and Fall Time	7 nS (max.) (20% → 80% of waveform)			
	Phase Noise Offset [10.0 MHz] (typical)	1 Hz	10 Hz	1 KHz	10 KHz
-98 dBc		-126 dBc	-145 dBc	-152 dBc	

Outline Dimensions (Unit : ±0.2 mm)



Mercury www.mercury-crystal.com

■ Taiwan : Tel:(+886)-2-2406-2779 / sales-tw@mercury-crystal.com

■ USA: Tel: (+1)-909-466-0427 / sales-us@mercury-crystal.com

■ China: Tel: (+86)-512-5763-8100 / sales-cn@mercury-crystal.com