

" OCXO " [Oven Controlled Crystal Oscillators]

OC14T

Square Wave

Best stability

±30 ppb

Voltage Control

DIP

3.3V

5.0V

Min.

5 MHz

Max.

40 MHz

Applications

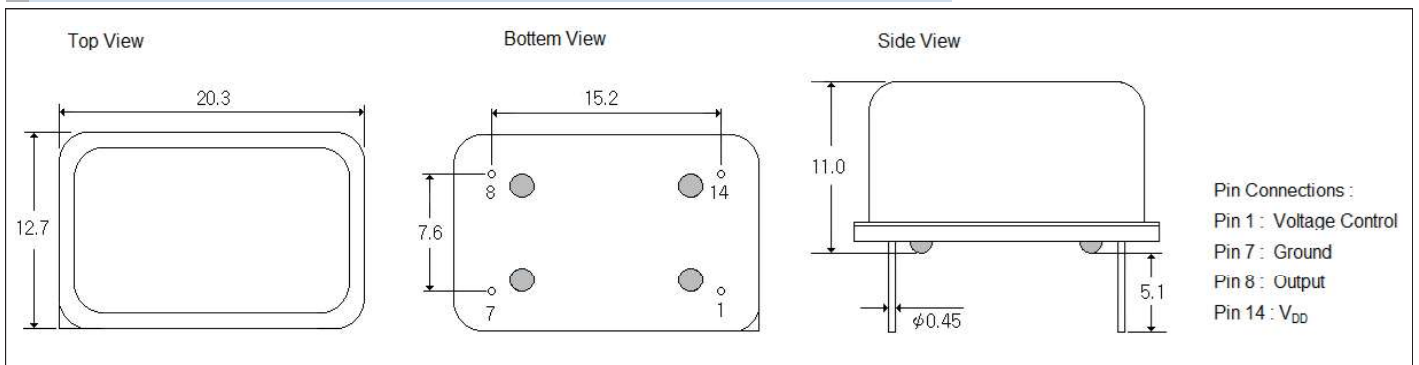
- OC14_ (20.3 * 12.7 * 11.0 mm)
- +3.3V , +5.0V Supply Voltages
- Voltage control (Electronic Frequency Tuning) is standard .



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

Output Wave Form		Square wave . Wave form code is " T "			
Supply Voltage		+3.3 V		+5.0 V	
Supply Voltage range , " Voltage code "		+3.3V ± 5% , " 3 "		+5.0V ± 5% , " 5 "	
Frequency Range		5 ~ 40.0 MHz Standard Frequency : 10.0 MHz		5 ~ 40.0 MHz Standard Frequency : 10.0 MHz	
Initial Calibration Tolerance		± 500 ppb (max.)		± 500 ppb (max.)	
		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)	± 50 ppb (max.) over 0°C to +70°C			
		± 100 ppb (max.) over -30°C to +70°C			
		± 100 ppb (max.) over -40°C to +85°C			
	vs Voltage Change	± 50ppb (max.) , for a ± 5% input voltage change .			
	vs Warm-up time (+25°C)	10 minute max. Within ± 100 ppb of its reference frequency.			
	vs Aging	± 5 ppb max./after 30 days ; ± 500 ppb max./first year ; ± 3 ppm max.over 10 years.			
Voltage Control	Freq. Deviation Range	> ± 5 ppm Reference to fo at +25°C and over operating temperature range.			
On pin 1 (EFC)	Control Voltage Range	+1.65V ± 1.65V		+2.5V ± 2.5V	
	Transfer Function	Positive : Increasing control voltage increases output frequency .			
(Electronic Freq. Tuning)	Input Impedance	50 K ohms min.			
	EFC Linearity	± 10 % (max.)			
Power	Power Dissipation (at +25°C)	0.8 Watts max. at steady-state; 600 mA max. at turn-on.			
Output	Output Logic High (V _{OH})	+2.4 V (min.)		+2.4 V (min.)	
	Output Logic Low (V _{OL})	+ 0.5 V (max.)		+ 0.5 V (max.)	
	Duty Cycle (V _{DD})	50 % ± 5% @ + 2.0V			
	Output Load	15pF			
	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
	-70 dBc	-108 dBc	-140 dBc	-150 dBc	

Outline Dimensions (Unit : ±0.2 mm)



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