

# " OCXO " [ Oven Controlled Crystal Oscillators ]

<b>OC18T</b>	<b>OC19T</b>	Best stability	Standard OCXO Series	DIP	3.3V	5.0V	Min.	Max.
Square Wave	Square Wave	±10 ppb					5 MHz	40 MHz

### Applications

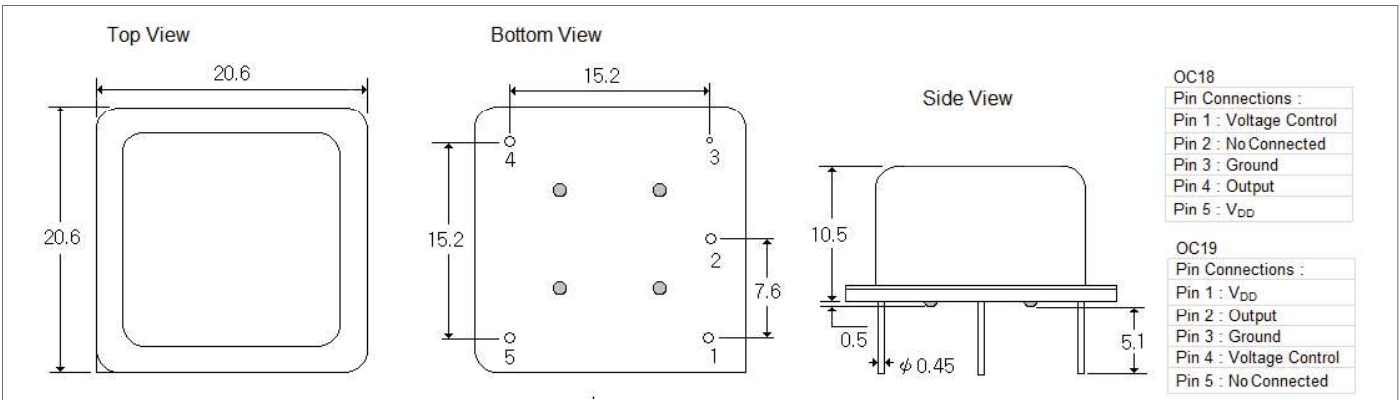
- OC18 / OC19\_ ( 20.6 \* 20.6 \* 11.0 mm ) typical.
- Full Size 5 pin dip full metal package
- +3.3V , +5.0V Supply Voltages
- Voltage control ( Electronic Frequency Tuning ) is standard .



### 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.) Vcon = +1.65 V		± 500 ppb ( max.) 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	± 0.5ppb ( max.) , for a ± 5% input voltage change .			
	vs Warm-up time (+25°C)	3 minute max. Within ± 50 ppb of its reference frequency.			
	vs Aging	± 0.5 ppb max./after 30 days ; ± 50 ppb max./first year ; ± 300 ppb max. over 10 years.			
Voltage Control On pin 1 (EFC)	Freq. Deviation Range	± 0.5 ppm min, ± 2 ppm max. Reference to fo at +25°C and over operating temperature range.			
	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	100 K ohms min.			
	EFC Linearity	± 10 % ( max.)			
Power	Power Dissipation ( at +25°C )	1.3 Watts max. at steady-state; 800 mA max. at turn-on.			
	Output Logic High ( V <sub>OH</sub> )	+2.4 V ( min.)		+3.5 V ( min.)	
Output	Output Logic Low ( V <sub>OL</sub> )	+ 0.5 V ( max.)		+ 0.5 V ( max.)	
	Duty Cycle ( V <sub>DD</sub> )	50 % ± 5% @ 2.0V			
	Load	15pF			
	Rise and Fall Time	7 nS ( max.) ( 20% → 80% of waveform )			
	Phase Noise Offset [ 20.0 MHz ] ( typical )	10 Hz	100 Hz	1 KHz	10 KHz
		-115 dBc	-135 dBc	-145 dBc	-150 dBc

### Outline Dimensions ( Unit : ±0.2 mm )



**Mercury** [www.mercury-crystal.com](http://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