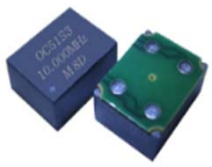
" OCXO " [Oven Controlled Crystal Oscillators]

OC51T	OC51S	Best stability	Standard OCXO Series	SMD	3.3V	5.0V	Min.	Max.
Square Wave	Clipped Sine Wave	± 20 ppb					10 MHz	40 MHz

Applications

- OC51_ (9.7 x 7.5 x 4.1 mm) Miniaturized 4-Pad SMD 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 "		Clipped Sine Wave. Wave form code is " S "	
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		10 ~ 40.0 MHz		10 ~ 40.0 MHz	
Initial Calibration Tolerance		± 500 ppb (max.)		± 500 ppb (max.)	
		Vcon = +1.65 V	Vcon = +2.5 V	Vcon = +1.65 V	Vcon = +2.5 V
Type of Crystal Cut Used		" IT - cut " crystal			
Frequency Stability	vs Temperature (refer to +25°C)	± 10 ppb (max.) over -30°C to +70°C			
		± 20 ppb (max.) over -40°C to +85°C			
	vs Voltage Change	± 10ppb (max.), for a ± 5% input voltage change .			
	vs Warm-up time (+25°C)	5 minute max. Within ± 0.1 ppm of its reference frequency.			
	vs Aging	± 3.0 ppb max./after 30 days ; ± 600 ppb max./first year ; ± 3 ppm max. over 10 years.			
	vs Reflow	± 1.0 ppm max . , 1 reflow and measured 24 hours afterwards.			
Voltage Control On pin 1 (EFC) (Electronic Freq. Tuning)	Freq. Deviation Range	> ± 5 ppm 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 .			
	Input Impedance	100 K ohms min.			
	EFC Linearity	± 10 % (max.)			
Power	Power Dissipation (at +25°C)	0.4 Watts max. at steady-state; 350 mA max. at turn-on.			
Output	Output Logic High (V_{OH})	+2.4 V (min.)	+4.5 V (min.)	_	_
	Output Logic Low (V_{OL})	+ 0.4 V (max.)	+ 0.4 V (max.)	_	_
	Duty Cycle (V_{DD})	50 % ± 5% @ 1.65V		_	
	Load	15pF		10 KΩ // 10 pF ± 10%	
	Output Voltage Level (peak to peak	_		0.8 V p-p (min.)	
	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
		-98 dBc	-126 dBc	-145 dBc	-152 dBc

Outline Dimensions (Unit : ±0.2 mm)