

" OCXO " [Oven Controlled Crystal Oscillators]

OC41T

Square Wave

Best stability

± 30 ppb

Standard
OCXO Series

SMD

3.3V

Min.

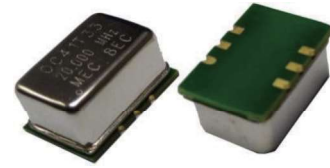
5 MHz

Max.

40 MHz

Applications

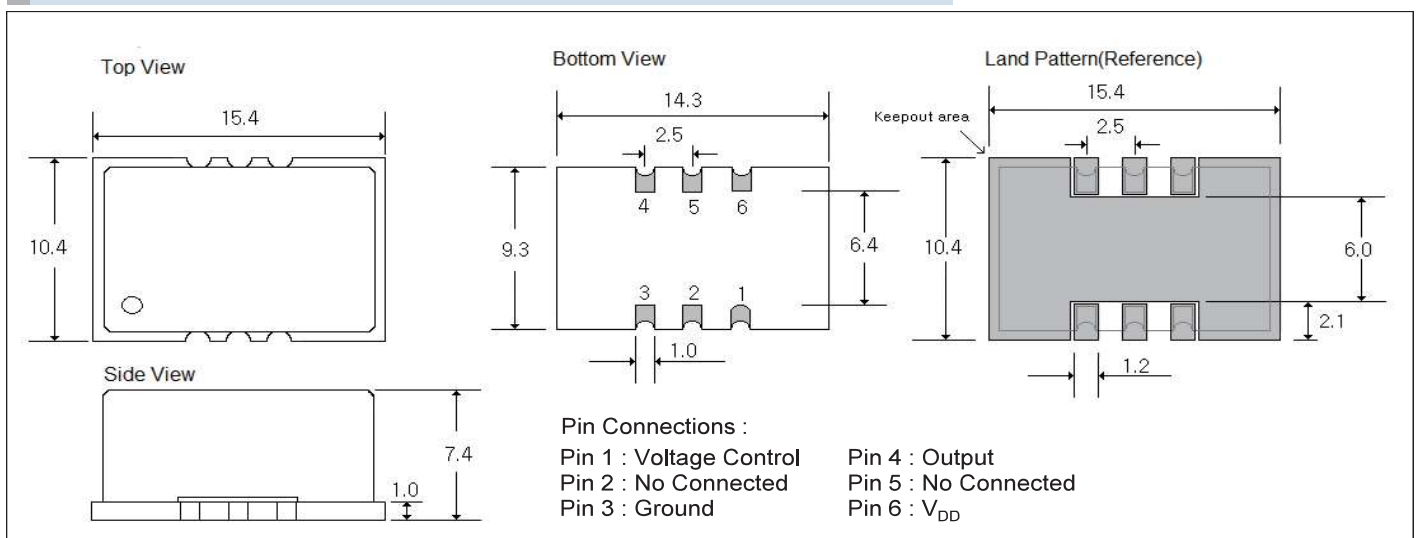
- OC41_ (14.3 * 9.3 * 6.5 mm)
- 6 pin SMD package
- +3.3V Supply Voltages
- Voltage control (Electronic Frequency Tuning) is standard .



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

Output Wave Form		Square wave . Wave form code is " T "			
Supply Voltage		+3.3 V			
Supply Voltage range , " Voltage code "		+3.3V ± 5% , " 3 "			
Frequency Range		5 ~ 40.0 MHz			
Initial Calibration Tolerance		Vcon = +1.65 V ; ± 500 ppb (max.) typ. , ± 200 ppb (max.) available			
Type of Crystal Cut Used		" IT - cut " crystal			
Frequency Stability	vs Temperature (refer to +25°C)	± 20 ppb (max.) over -20°C to +70°C ± 30 ppb (max.) over -40°C to +85°C			
	vs Voltage Change	± 10 ppb (max.) , for a ± 5% input voltage change .			
	vs Warm-up time (+25°C)	5 minute max. Within ± 100 ppb of its reference frequency.			
	vs Aging	± 3.0 ppb max./after 30 days ; ± 400 ppb max./first year ; ± 2 ppm max. over 10 years.			
	vs Load Change	≤ ± 10 ppb , for ± 10 % load condition change .			
	vs Reflow	± 1.0 ppm max . , 1 reflow and measured 24 hours afterwards.			
Voltage Control	Freq. Deviation Range	> ± 5 ppm Reference to fo at +25°C and over operating temperature range.			
(Electronic Freq. Tuning)	On pin 1 (EFC)	Control Voltage Range	+1.65V ± 1.65V		
	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)	0.6 Watts max. at steady-state; 600 mA max. at turn-on.			
	Output	Output Logic High (V _{OH})	+ 2.4 V (min.)		
Output Logic Low (V _{OL})		+0.4 V (max.)			
Duty Cycle (V _{DD})		50 % ± 5% @ 1.65V			
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
	-98 dBc	-126 dBc	-145 dBc	-152 dBc	

Outline Dimensions (Unit : ±0.2 mm)



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