

FCom OCXO

Series FOC-7S

Standard OCXO 9x7 4-SMD



Feature

- Dimension 9.7 x 7.5mm, miniaturized 4-Pad SMD package
- Low Power Consumption
- ± 20 ppb stability over -40 to 85°C
- Stratum 3 (Overall ± 4.6 ppm including 20 years aging.)

Application

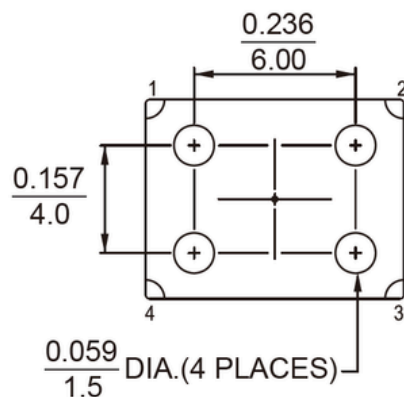
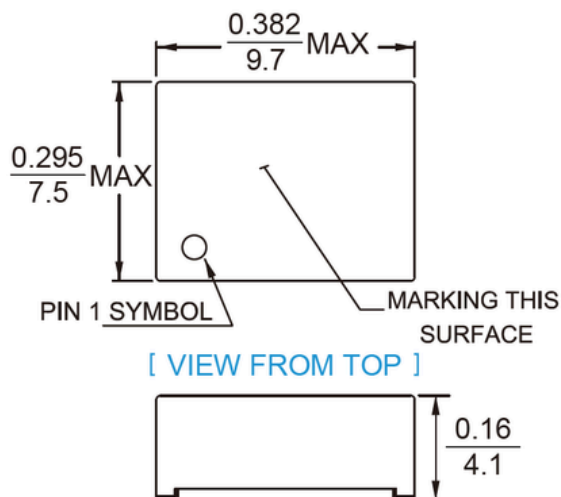
- Small Cell, Portable Telecommunication Device
- Test and Instrumentation
- Synthesizer, Digital switch, Reference Timing Circuit
- Packet Timing Protocol (e.g. IEEE-1588)

ELECTRICAL SPECIFICATIONS

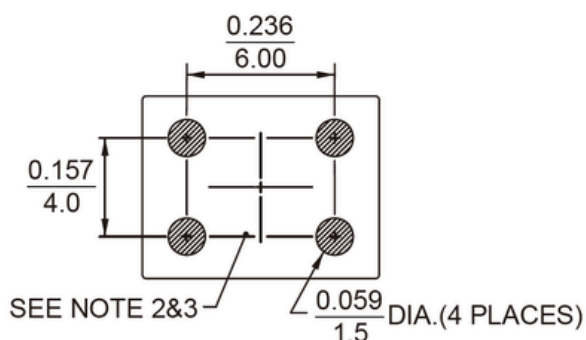
Parameters		Symbol	Min.	Typ.	Max.	Units	Notes
Output Frequency		F	10	-	40	MHz	
Waveform		-	CMOS, Clipped Sine			-	
Level		-	-			-	
"1" Level	Rectangular	-	2.4	-	-	V	@+1.65 V
"0" Level		-	-	-	0.4	V	
Duty cycle		TH/T	45	50	55	%	
Clipped Sine		Vp-p	0.8	-	-	Vp-p	
Load (Rectangular/Clipped Sine)		-	15pF / 10Kohm//10pF			-	
Spurious		-	-	-	-60	dBc	
Frequency Stability	Ambient	-	-20	-	+20	ppb	-40°C to +85°C, referenced to +25°C
	Aging		-	-	-		
	Daily		-3.0	-	+3.0	ppb	after 30 days
	Yearly		-0.6	-	+0.6	ppm	
	10 years		-3.0	-	+3.0	ppm	
	Voltage		-5	-	+5	ppb	±5% Change
	Warm-up		-0.1	-	+0.1	ppm	In 5 minutes @ +25°C, referenced to 1 hour
Phase Noise @ 20 MHz	10Hz	PN	-	-98	-92	dBc/Hz	
	100Hz		-	-126	-120		
	1kHz		-	-145	-140		
	10kHz		-	-152	-150		
Electrical Frequency Adjustment	Range	-	-	-	-5.0	ppm	VCO @ 0 V
			5.0	-	-		VCO @ +3.3 V
	Control		0	1.65	3.3	V	
	Slope		-	Positive	-		
	VCO Input impedance		100	-	-	KΩ	
Input Power	Voltage	Vcc	3.135	3.3	3.465	V	
	Current	Icc	-	-	350	mA	@ turn on
	Steady state	-	-	0.3	0.4	W	@ +25°C

Note : The table shows common spec. if you have special spec. requirement , please feel free to contact our salesperson.

DIMENSION(mm)



**Numbers for reference only.
(Not stamped on unit)
(VIEW FROM BOTTOM)**



PIN CONNECTIONS	
PIN	FUNCTION
1 (See NOTE 1)	VCO INPUT or NOT CONNECTED
2	0 VOLTS AND CASE
3	R.F. OUTPUT
4	+VDC

RECOMMENDED SOLDER PAD LAYOUT

Notes 1.

If the specification does not specify parameters for PIN 1 , then PIN 1 must remain unconnected.

Notes 2.

Copper in this area should be kept to a minimum to reduce heat loss from OCXO.

Notes 3.

Bottom side reflow is forbidden unless specified in oscillator specification.

Notes 4. Aqueous cleaning is FORBIDDEN

Notes 5. Test condition : A 0.1uF and 10uF X7R decoupling capacitor is required close to the unit.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C) \ ppb	± 5	± 10	± 20	± 30	± 50
@-20~70°C	△	○	○	○	○
@-40~85°C	×	△	○	○	○

○: Available △: Conditional ×: Not available
Inclusive of calibration @25°C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration.