OCXO - OC11T5S SERIES

SC-Cut Crystal - Square Wave - 5.0 Volts

- **Frequency Range 1.25MHz to 100.0MHz**
- **25.4 x 25.4 x 16.0mm 5 pin metal, solder-sealed package**
- **Supply Voltage 5.0 Volts**
- **SC-Cut Crystal**
- **Squarewave Output**
- **EFC (Voltage control) as standard**

DESCRIPTION

OC11T5S series oven-controlled crystal oscillators are close tolerance OCXOs with excellent phase noise performance.

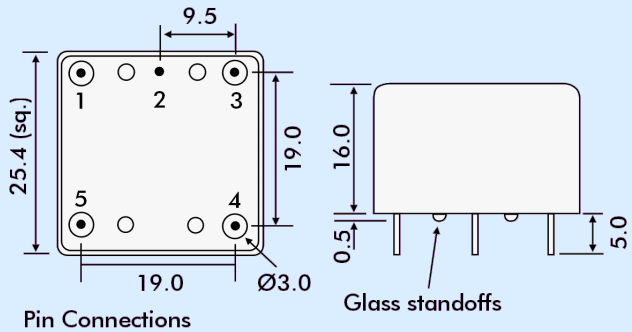
SPECIFICATION

Crystal Cut:		SC-cut
Output Waveform:		Sine Wave
Supply Voltage:		+5.0 VDC ±0.2V
Frequency Range:		1.25MHz to 100.0MHz
Initial Calibration Tolerance:		±0.5ppm max.(at Vcon +2.5V)
Frequency Stability		
	over 0° to +60°C:	±0.01ppm
	over -20° to +70°C:	±0.0.ppm
	over -40° to +85°C:	±0.03ppm
	vs. Voltage Change:	<±20ppb for ±5% change
	vs. Ageing:	±2.0ppb max. per day ±0.1ppm per first year ±0.5ppm over 10 years
	vs. Load Change:	<±20ppb for ±5% change
Warm-up Time:		1 minutes max. to within ±0.1ppm of nominal freq.
Voltage Control		
	Control Voltage Centre:	+2.5 Volts (Vcon)
	Freq. Deviation Range:	±0.5ppm min., ±2ppm max. ref. to 25°C and O.T.R.
	Control Voltage Range:	2.5V ±2.0Volts
	Transfer Function:	Positive: Increasing control voltage increases output frequency
	Input Impedance:	100kΩ minimum
	EFC Linearity:	±10% maximum
Power Dissipation:		1.0W max. steady state 3.0W max. at turn on
Output		
	Load:	15pF HCMOS
	Output Logic HIGH:	+4.5V minimum
	Output Logic LOW:	0.5V maximum
	Duty Cycle:	50%±10%
	Rise/Fall Time:	5ns max (20%~80%) *Frequency dependant*
Reference Voltage:		+4.0±0.3VDC or custom
Envionmental		
	Storage Temperature:	-55° to +125°C
	Shock:	2000g, 0.3ms ½ sine
	Vibration:	10 ~2000Hz / 10g

PHASE NOISE (at 10MHz)

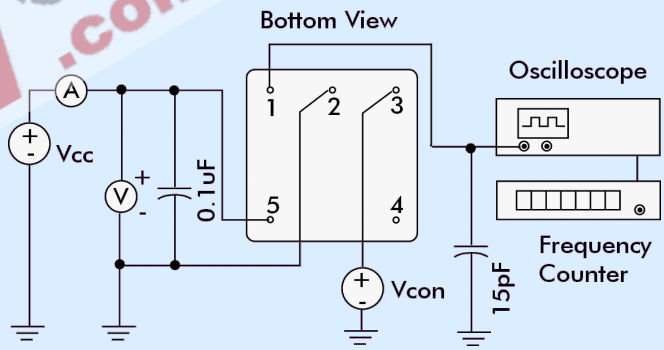
Offset	dBc/Hz
1Hz	-80
10Hz	-120
100Hz	-140
1kHz	-145
10kHz	-150

OUTLINE & DIMENSIONS



Pin Connections
1 RF output
2 Ground/case
3 Voltage control (EFC)
4 Reference Voltage Output
5 Supply Voltage

TEST CIRCUIT



PART NUMBER FORMAT

Example: **OC11GT5S-10.000-0.02/-20+70**

OCXO Package: OC11
RoHS Compliance
G: RoHS Compliant
Blank: Non-compliant
T: Output Squarewave
5: Supply Voltage 5.0Volts
S: SC-Cut Crystal
Nominal Frequency 10.0MHz
Stability in ±ppm
Operating Temperature Range °C
Lowest Temperature/Highest Temperature

EUROQUARTZ LIMITED Blacknell Lane CREWKERNE Somerset UK TA18 7HE
Tel: +44 (0)1460 230000 Fax: +44 (0)1460 230001 Email: info@euroquartz.co.uk www.euroquartz.co.uk