

SC-Cut Crystal - Square Wave - 5.0 Volts

- Frequency Range 5.0MHz to 20.0MHz
- 50.8 x 50.8 x 16.0mm 7 pin metal, solder-sealed package
- Supply Voltage 5.0 Volts
- SC-Cut Crystal
- Squarewave Output
- EFC (Voltage control) as standard

DESCRIPTION

OC22T5S series oven-controlled crystal oscillators are close tolerance OCXOs with excellent phase noise performance.

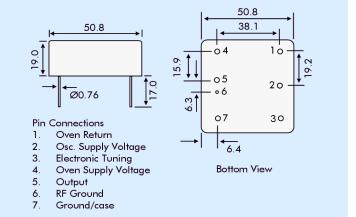
SPECIFICATION

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Crystal Cut:		SC-cut
Output Waveform:		Square Wave
Supply Voltage:		+5.0 VDC ±0.2V
Frequency Range:		5.0MHz to 20.0MHz
Initial Calibration Tolerance:		±0.1ppm max.(at Vcon +2.5V)
Frequer	ncy Stability	
	over 0° to +60°C:	±0.01ppm
	over -20° to +70°C:	±0.02ppm
	over -40° to +85°C:	±0.03ppm
	vs. Voltage Change:	<±1.0ppb for ±5% change
	vs. Ageing:	±0.5ppb max per day
		±50ppb per first year
		±150ppb over 10 years
	vs. Load Change:	$<\pm1.0$ ppb for $\pm5\%$ change
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Warm-up Time:		5 minutes max. to within
	•	±10ppb of nominal freq.
Voltage	Control	
Ũ	Control Voltage Centre:	+2.5 Volts (Vcon)
	Freq. Deviation Range:	±0.5ppm min., ±1ppm max.
	q	ref. to 25°C and O.T.R.
	Control Voltage Range:	$2.5V \pm 2.0Volts$
	Transfer Function:	Positive: Increasing control
		voltage increases output
		frequency
	Input Impedance:	100kΩ minimum
	EFC Linearity:	±10% maximum
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Power Dissipation:		2.0W max. steady state
		6.0W max. at turn on
0		
Output	Load:	15pF HCMOS
	Output Logic HIGH:	+4.5V minimum
	Output Logic LOW:	0.5V maximum 50%±10%
	Duty Cycle:	
	Rise/Fall Time:	5ns max (20%~80%)
n (Frequency dependant
Reference Voltage:		+4.0±0.3VDC or custom
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Envionn		
	Storage Temperature:	-55° to +125°C
	Shock:	2000g, 0.3ms ½ sine
	Vibration:	10 ~2000Hz / 10g

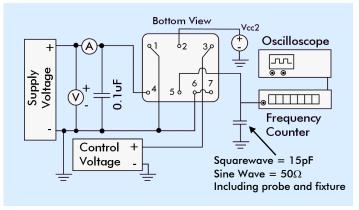
PHASE NOISE (at 10MHz)

Offset	dBc/Hz
1Hz	-85
10Hz	-120
100Hz	-140
1kHz	-145
10kHz	-150

OUTLINE & DIMENSIONS



TEST CIRCUIT



PART NUMBER FORMAT

