

RADITEK INC.

OVEN CONTROLLED CRYSTAL OSCILLATORS

code-z



ROCXO-500C SERIES

- Features

Crystal Oscillators with Ultra High precision (SC-Cut)

Wide Frequency Range: 1MHz to 100MHz

Standard Frequencies Available

Standard Package

Order Examples: ROCXO-500C-10.00M-5v-SINE, AT

Description: ROCXO-500C (Oven Controlled Crystal Oscillator, 10 MHz, 5 Volts, Output-SINE, Crystal Cut-AT)

Frequency Range	1MHz ~ 100MHz
Standard Frequencies	5.0, 8.192, 10.0, 12.8, 13.0, 15.36, 16.384, 20.0, 40.0, 80.0, 100.0MHz
Supply Voltage	+5.0VDC +12VDC
Output	Sine or HCMOS
Crystal Cut	AT-Cut or SC-Cut
Frequency Stability	
vs. Operating Temp. Range	See table below
vs. Aging/1 day	AT-Cut : ± 1 ppb SC-Cut : ± 0.2 ppb
vs. Aging/1st year	AT-Cut : ± 0.1 ppm SC-Cut : ± 0.02 ppm
vs. Voltage Change 5%	± 10 ppb Max.
vs. Load Change 5%	± 10 ppb Max.
Electronic Frequency Tuning (EFC)	
Tuning Range	AT-Cut : ± 3 ppm SC-Cut : ± 1 ppm
Control Voltage Range	0 to +5VDC 0 to +10VDC
Linearity	$\pm 20\%$
Transfer Function	Positive
Power Dissipation	5W at steady-state +25°C amb 2W at turn-on
Warm-up Time (at 25°C)	AT-Cut: 5 minutes max. SC-Cut: 4 minutes max. (to ± 0.1 ppm of nominal)
HCMOS Square Wave	
VOH Logic High "1"	4.5 VDC min. for Vcc=12V or 5V 15pF load
VOL Logic Low "0"	0.5 VDC max. for Vcc=12V or 5V 15pF load
Duty Cycle	45%/55%
Rise and Fall Times	10ns Max.
Load	15pF
Sine Wave	
Output	0 to +17 dBm min. (specify)
Load	50 Ω
Storage Temp. Range	-55 ~ +105°C

ROCXO-500C Series-z

Specifications may be subject to change

10/16/06

WORLD HQ: 1702H Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.

Telephone: (408) 266-7404 FAX: (408) 266-4483

WEB: www.raditek.com, E-mail: sales@raditek.com

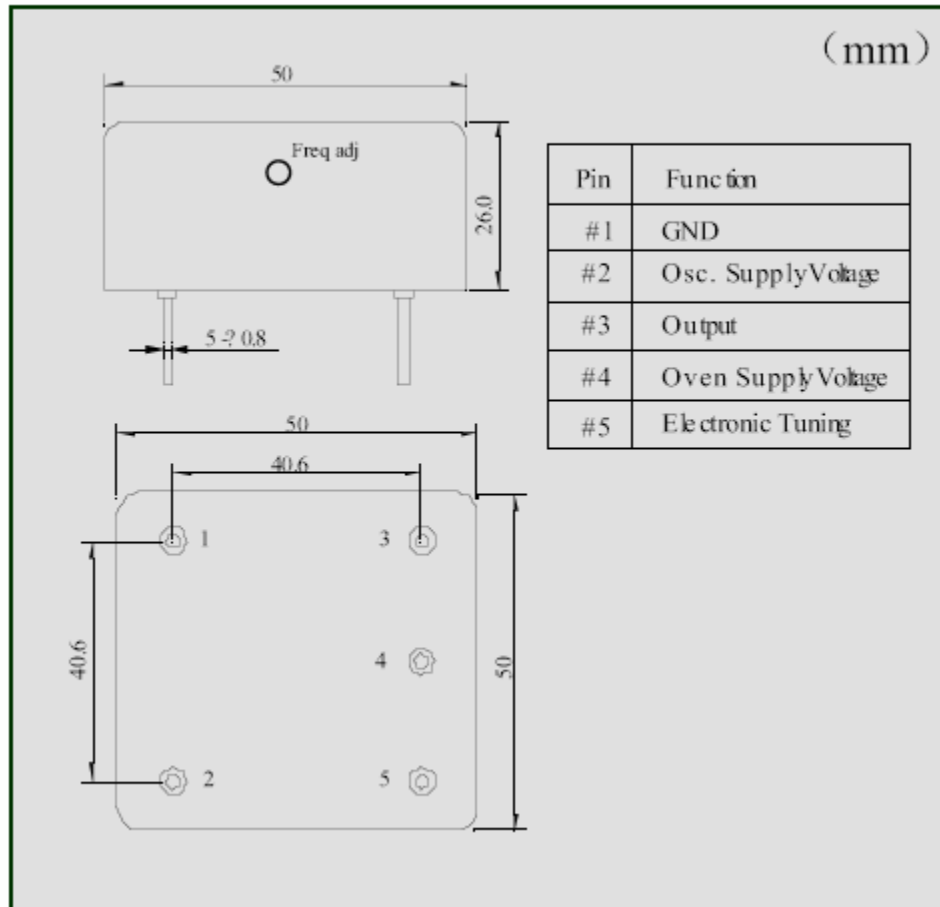
RADITEK INC.

OVEN CONTROLLED CRYSTAL OSCILLATORS

code-z

ROC XO-500C SERIES

● Outline Drawing



● Frequency Stability vs. Operating Temperature Range

Operating Temperature Range(°C)	AT-Cut(ppm)	SC-Cut(ppm)
0 ~ +50	±0.005	±0.001
-20 ~ +70	±0.01	±0.002
-40 ~ +85	±0.02	±0.005