

Features

- ▶ Excellent phase noise performance @ 100MHz
- ▶ -160dBc noise floor @ 10.0MHz
- ▶ Fundamental mode frequencies up to 120MHz
- ▶ Compact 14-pin DIL package (SMD optional)
- ▶ High shock and vibration resistance

Example Applications

- ▶ Digital switching
- ▶ Telecomm transmission
- ▶ SONET, SDH, DWDM, FDM/36, WIMAX
- ▶ Airborne equipment
- ▶ Battery operated systems

Ordering Information

Product name + option codes + frequency
 eg: **SCOCXOHV/TBR 10.00MHz** 5.0V, ±50ppb -20+70°C
SCOCXOHW/CVD1 100MHz 3.3V, ±250ppb -40+85°C, SMD D1
 Option code X (eg SCOCXOHV/X) denotes a custom spec.

◆ Product is NOT designed to withstand 260°C reflow processing

Specifications

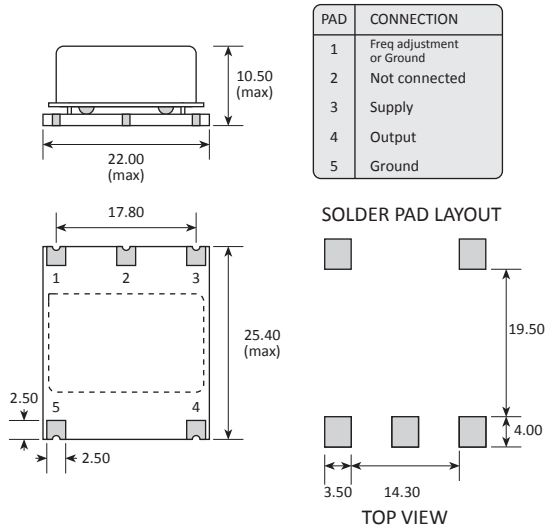
SCOCXOHW: 3.3V supply

SCOCXOHV: 5.0V supply

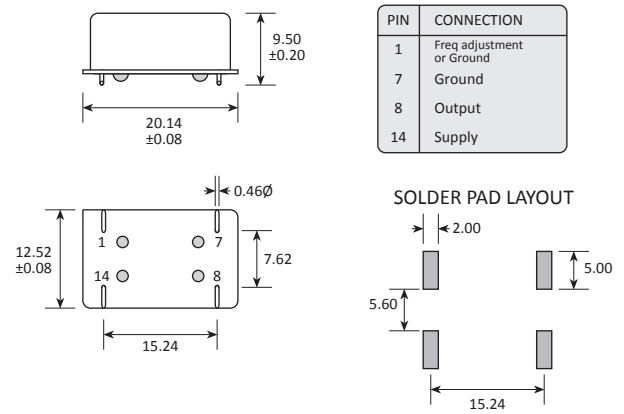
Parameters	Variant		Option Codes
	W	V	
Frequency range: 10.0 ~ 120MHz	■	■	
Temperature stability (±ppb max): 0 to +60°C -20 to +70°C -40 to +85°C	75 50 150	50 25 100	A TA B TB C TC
Frequency stability (ppb): ±0.3ppm max first year (≤40MHz) ±2.5ppm max in 10 years (≤40MHz) ±1.0ppm max first year (>40MHz) ±4.0ppm max in 10 years (>40MHz) ±0.1ppm max vs V _{DD} ±30ppb max vs load ±10%	■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■	
Short term stability: 1x10 ⁻¹⁰ max, τ 0.1 to 30s 5x10 ⁻¹¹ typ at 1s	■ ■	■ ■	
Storage temperature range: -55 to +125°C	■	■	
Output waveform: CMOS '0'=+0.4V max, '1'=V _{DD} -0.5V min 40:60 max Rise/fall times 7ns max (no load)	■ ■ ■ ■	■ ■ ■ ■	
Load: 3pF min, 47pF max	■	■	
Start up time: 5ms max	■	■	
Frequency adjustment: ±2.5ppm min ≤ 40MHz ±4.0ppm min > 40MHz Control voltage 0V ~ 3.3V, pin 1 Control voltage 0.5V ~ 5.0V, pin 1 Variable resistor 0~10kΩ, pins 1 to 7 None (int accuracy ±1.0ppm) None (int accuracy ±0.5ppm)	■ ■ □ □ □ □ □	■ ■ □ □ □ □ □	V V R A B
Supply voltage (V_{DD}): +3.3V (±0.15V) +5.0V (±0.20V)	■	■	
Input current (mA max): @ +25°C @ -20°C	120 170	80 120	
Warm up time (secs): current 300mA max @ 25°C to within ±0.1ppm @ 25°C	30 120	10 60	
Phase noise (dB typ @ 100MHz): -90dBc/Hz @ 10Hz -120dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100kHz	■ ■ ■ ■ ■	■ ■ ■ ■ ■	
Shock & vibration: 5,000G, 0.3ms ½-sine 10.0 ~ 2,000Hz, 20G	■ ■	■ ■	
Package: Through hole 14 pin DIL SMD options D1 or D2	■ □	■ □	specify

■ Standard. □ Optional - Please specify required code(s) when ordering

Option D1



Option D2



Soldering Profile

