

Typical Applications

*PCS Base Stations
Land Mobile Radio
Cellular Telephony
Radio in the Local Loop
Test Equipment*

Features

*EFC Standard
Low Profile Standard Package
Hermetically Sealed Package
Surface Mount Options Available
Stratum III Option Available*

Frequency Range

> 30 MHz – 120 MHz

Parameters		Model Numbers	
Operating Temperature Range	Frequency Stability * (ppm)	Clipped Sine Wave (1 Vpp min. into 1kΩ)	Square Wave (CMOS)
0....50°C	± 1.0 ppm	959VWAB	959VWHAB
	± 2.0 ppm	959VWAD	959VWHAD
0.....70°C	± 2.5 ppm	959VWDE	959VWHDE
	± 5.0 ppm	959VWDF	959VWHDF
-20....+70°C	± 2.0 ppm	959VWBD	959VWHBD
	± 2.5 ppm	959VWBE	959VWHBE
-30....+70°C	± 1.0 ppm	959VWCB	959VWHCB
	± 2.0 ppm	959VWCD	959VWHCD
	± 2.5 ppm	959VWCE	959VWHCE
-40....+85°C	± 1.0 ppm	959VWEB	959VWHEB
	± 2.0 ppm	959VWED	959VWHED
	± 2.5 ppm	959VWEE	959VWHEE

Additional Parameters

Supply Voltage: +5 Vdc ± 5%
 Current
 Clipped Sinewave: 2 mA to 6 mA
 CMOS: 10 mA to 60 mA
 Aging: ± 1 ppm/year
 Mechanical Frequency Control: ± 3.5 ppm min.
 Electrical Frequency Control
 Voltage Range: 0.5 to 4.5 Vdc
 Deviation: ± 8 ppm min.
 (others available)
 Slope: Positive
 Input Impedance: > 10 kohms

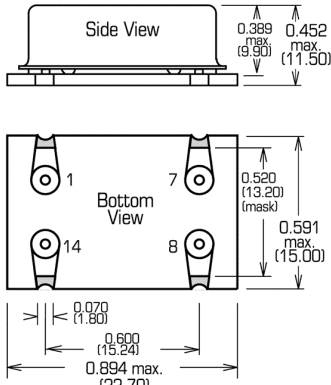
Typical Phase Noise @ 40 MHz

1Hz Offset <- 55 dBc / Hz
 10Hz Offset <-90 dBc / Hz
 100Hz Offset <-120 dBc / Hz
 1kHz Offset <-140dBc / Hz
 10kHz Offset <-150dBc / Hz

* Stratum III option of ±4.6 ppm total for all conditions over 20 years available.

Enclosures

SMT "S" Package

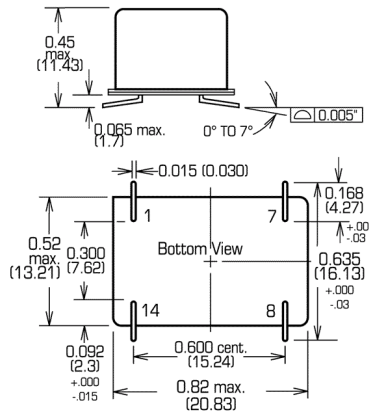


PIN CONNECTIONS

- 1 - Voltage Control or N/C
- 7 - GND
- 8 - RF Output
- 14 - Supply Voltage

Dimensions: Inches (mm)

Gullwing "G" Package

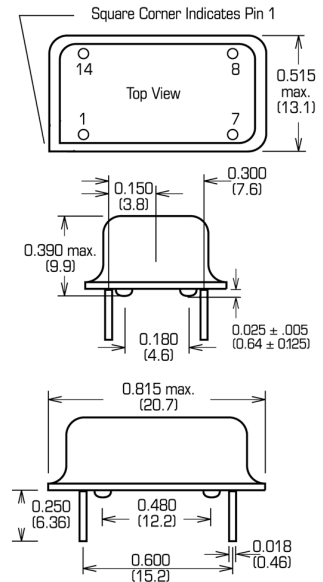


PIN CONNECTIONS

- 1 - EFC or N/C
- 7 - GND/Case
- 8 - RF Output
- 14 - Supply Voltage

Dimensions: Inches (mm)

Through-hole "T" Package



PIN CONNECTIONS

- 1 - EFC when specified (Pin 1 eliminated when not required.)
- 7 - GND
- 8 - RF Output
- 14 - Supply Voltage

Dimensions: Inches (mm)

Model	EFC	Waveshape Freq. Stab. Temp. Range	Package Code	Frequency
959W	Blank = No EFC V= EVC Option	WHAB	T = Through-hole S = SMT G = Gullwing	40M00000

Typical P/N = 959VWABT40

Unless otherwise specified, any TCXO ordered without either Mechanical or Electrical Trim capability shall have a frequency calibration tolerance at Room Temperature of ± 2 ppm and the frequency stability tolerance over temperature will be from that measured value.