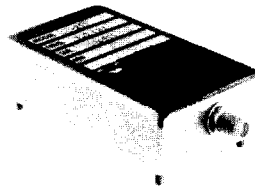


TCXOs
(140-1000 MHz)



	CO-255 SERIES	CO-256 SERIES	CO-856 SERIES
FREQUENCY	140.1 - 420 MHz	420.1 - 630 MHz	630.1 - 1000 MHz
STABILITY	<p>Temperature</p> <p>(Temp. Range A) -15°C to +35°C:</p> <p>(Temp. Range B) 0°C to +50°C:</p> <p>(Temp. Range C) 0°C to +70°C:</p> <p>(Temp. Range D) -20°C to -70°C:</p> <p>(Temp. Range E) -40°C to +75°C:</p> <p>(Temp. Range F) -55°C to +85°C:</p> <p>(Temp. Range G) -55°C to +105°C:</p> <p>(Temp. Range H) -55°C to +125°C:</p>		
	<p>CO-255A57: $\pm 5 \times 10^{-7}$</p> <p>CO-255A17: $\pm 1 \times 10^{-7}$</p> <p>CO-255B16: $\pm 1 \times 10^{-6}$</p> <p>CO-255B57: $\pm 5 \times 10^{-7}$</p> <p>CO-255B27: $\pm 2 \times 10^{-7}$</p> <p>CO-255C36: $\pm 3 \times 10^{-6}$</p> <p>CO-255C16: $\pm 1 \times 10^{-6}$</p> <p>CO-255C37: $\pm 3 \times 10^{-7}$</p> <p>CO-255D56: $\pm 5 \times 10^{-6}$</p> <p>CO-255D16: $\pm 1 \times 10^{-6}$</p> <p>CO-255D57: $\pm 5 \times 10^{-7}$</p> <p>CO-255E56: $\pm 5 \times 10^{-6}$</p> <p>CO-255E26: $\pm 2 \times 10^{-6}$</p> <p>CO-255E16: $\pm 1 \times 10^{-6}$</p> <p>CO-255F56: $\pm 5 \times 10^{-6}$</p> <p>CO-255F26: $\pm 2 \times 10^{-6}$</p> <p>CO-255F16: $\pm 1 \times 10^{-6}$</p> <p>CO-255G56: $\pm 5 \times 10^{-6}$</p> <p>CO-255H15: $\pm 1 \times 10^{-5}$</p>	<p>CO-256A57: $\pm 5 \times 10^{-7}$</p> <p>CO-256A17: $\pm 1 \times 10^{-7}$</p> <p>CO-256B18: $\pm 1 \times 10^{-6}$</p> <p>CO-256B57: $\pm 5 \times 10^{-7}$</p> <p>CO-256B27: $\pm 2 \times 10^{-7}$</p> <p>CO-256C36: $\pm 3 \times 10^{-6}$</p> <p>CO-256C16: $\pm 1 \times 10^{-6}$</p> <p>CO-256C37: $\pm 3 \times 10^{-7}$</p> <p>CO-256D56: $\pm 5 \times 10^{-6}$</p> <p>CO-256D16: $\pm 1 \times 10^{-6}$</p> <p>CO-256D57: $\pm 5 \times 10^{-7}$</p> <p>CO-256E56: $\pm 5 \times 10^{-6}$</p> <p>CO-256E26: $\pm 2 \times 10^{-6}$</p> <p>CO-256E16: $\pm 1 \times 10^{-6}$</p> <p>CO-256F56: $\pm 5 \times 10^{-6}$</p> <p>CO-256F26: $\pm 2 \times 10^{-6}$</p> <p>CO-256F16: $\pm 1 \times 10^{-6}$</p> <p>CO-256G56: $\pm 5 \times 10^{-6}$</p> <p>CO-256H15: $\pm 1 \times 10^{-5}$</p>	<p>CO-856A57: $\pm 5 \times 10^{-7}$</p> <p>CO-856A17: $\pm 1 \times 10^{-7}$</p> <p>CO-856B16: $\pm 1 \times 10^{-6}$</p> <p>CO-856B57: $\pm 5 \times 10^{-7}$</p> <p>CO-856C36: $\pm 3 \times 10^{-6}$</p> <p>CO-856C16: $\pm 1 \times 10^{-6}$</p> <p>CO-856D56: $\pm 5 \times 10^{-6}$</p> <p>CO-856D16: $\pm 1 \times 10^{-6}$</p> <p>CO-856E56: $\pm 5 \times 10^{-6}$</p> <p>CO-856E26: $\pm 2 \times 10^{-6}$</p> <p>CO-856F56: $\pm 5 \times 10^{-6}$</p> <p>N/A</p> <p>N/A</p>
Aging Rate	1 x 10 ⁻⁶ /year		
Short Term (Allan Variance)	1 x 10 ⁻⁹ /second under constant conditions		
Frequency vs Supply	2 x 10 ⁻³ per percent in supply		
OUTPUT / SUPPLY ($\pm 5\%$)	<p>Output level</p> <p>Standard: ≥ 0.5 Vrms/50Ω (+7 dBm)</p> <p>*Option "R": ≥ 1.0 Vrms/50Ω (+13 dBm)</p> <p>**Option "M": 100K ECL</p> <p>***Supply $\pm 5\%$</p> <p>+15 Vdc</p> <p>+15 Vdc</p> <p>+15 Vdc and -5.2 Vdc (-4.5 Vdc optional)</p> <p>* Not available in CO-856</p> <p>** Only available in CO-255</p> <p>*** Any supply in 12-24 Vdc range optional</p>		
Current	Sine: <50 mA ECL: <30 mA for oscillator; also <60 mA at -5.2V	<60 mA	<85 mA
Harmonics and Sub-Harmonics (sine output)	Harmonics and subharmonics are -20 dBc. Improved harmonic and subharmonic attenuation optional.		
Phase Noise	See page 37 for standard and low noise Option L2 specifications.		
FREQUENCY ADJUSTMENT	<p>Mechanical</p> <p>Range sufficient to compensate for 5 to 10 years of crystal aging; settable to $<1 \times 10^{-7}$</p> <p>Electronic Tuning Option "V"</p> <p>VCXO operation permits remote frequency adjustment or locking onto an external frequency source. Add "V" to Model Number. Nominal range with 0 to +5 volt control input is 3×10^{-6} total (Wider deviations available). V options not available in CO-856. For very wide deviation and/or linear voltage control, see TC/VCXOs in the VCXO section on page 76.</p>		
SIZE/ CONFIGURATION	<p>2" x 3" x 3/4" (51 x 76 x 19 mm)</p> <p>SMA output connector on 2" x 3/4" side, pins for supply and studs on base.</p> <p>Option "U": Replace SMA connector with SMC.</p> <p>Option "P": Pins for printed circuit board mount and studs on base</p>	<p>2" x 4" x 3/4" (51 x 102 x 19 mm)</p> <p>SMA output connector on 2" x 3/4" side, pins for supply and studs on base.</p> <p>Option "U": Replace SMA connector with SMC.</p>	<p>1.75" x 3.75" x 0.75" (45 x 95 x 19 mm)</p> <p>SMA output connector on 1.75" x 0.75" side, pins for supply and hold-down on base.</p> <p>Option "U": Replace SMA with SMC.</p>
ENVIRONMENTAL	See page 98 for environmental specifications and screen test option.		
HOW TO ORDER	See page 41		

TCXOs
(140-1000 MHz)

ORDERING METHOD

For example, a 400 MHz TCXO with stability of $\pm 1 \times 10^{-6}$ over -20°C to $+70^{\circ}\text{C}$ and standard $+15\text{V}$ supply $+7\text{ dBm}/50\Omega$ sinewave output via SMA connector is

CO-255 D 16 at 400 MHz = CO-255D16 at 400 MHz

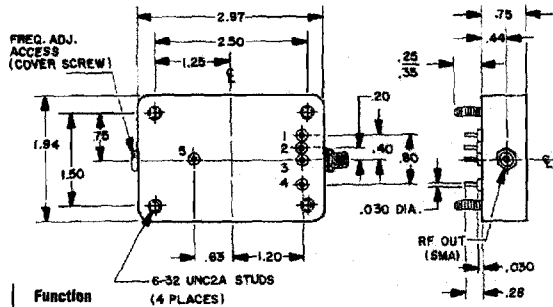
Basic Series CO-255/256/856
Temp. Range (e.g. "D")
Stability over Temp. (e.g. "16")

Frequency
*Low phase noise (L2)
*Mechanical option (U, P)
*VCXO option (V)
*Input/output option (M, R)

NOTE: If none of our standard models with coded options meet your specific needs, please detail the differences from our closest standard model (e.g. CO-255D16 except 12 Vdc supply and $+7\text{ dBm}/50\Omega$ output). *Leave blank if option is not desired

OUTLINE/INSTALLATION DRAWINGS

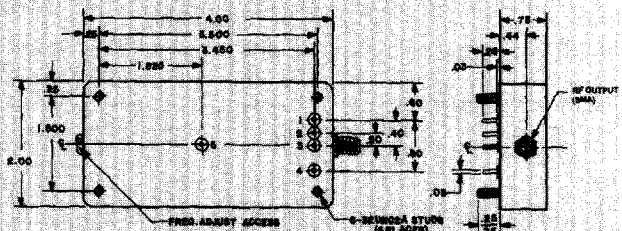
CO-255 SERIES



Pin	Function
1	Supply (+)
2	Case
3	N/C
4	0 volts, case
*5	Case

* For models with electronic tuning, control voltage is applied from pin 5 to pin 4.

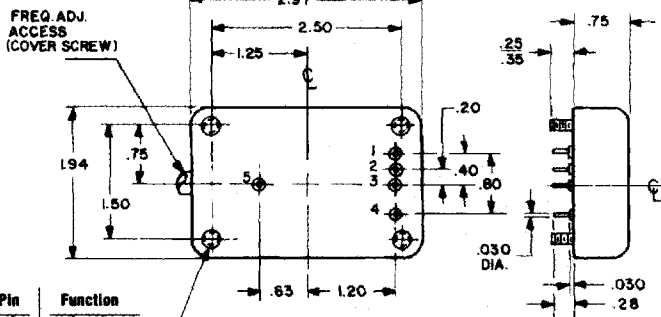
CO-256 SERIES



Pin	Function
1	Supply (+)
2	Case
3	N/C
4	0 volts, case
*5	Case

* For models with electronic tuning, control voltage is applied from pin 5 to pin 4.

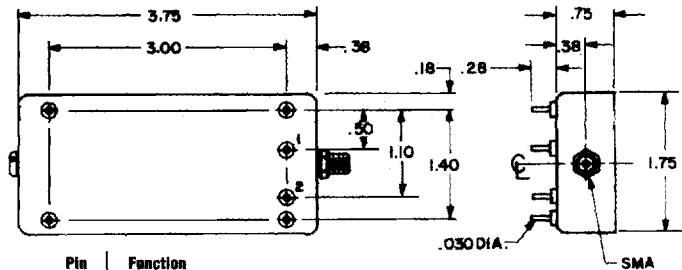
CO-255P (pcb mount) SERIES



Pin	Function
1	Supply (+)
2	Case
3	RF Output
4	0 volts, rf return, case
*5	Case

* For models with electronic tuning, control voltage is applied from pin 5 to pin 4.

CO-856 SERIES



Pin	Function
1	0 volts, case
2	Supply (+)

Markings do not appear on oscillators; they are for reference only. Dimensions are in inches. Case dimension tolerances are $\pm .02''$



Immediate need? Please call. (203) 853-4433
Let our staff of application engineers assist you with your order.