

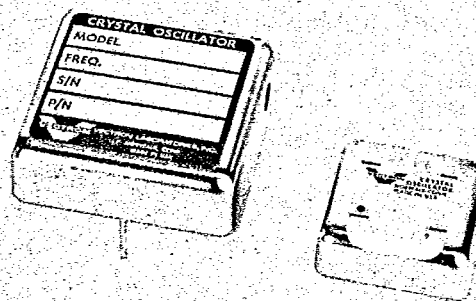


Low Cost Moderate Stability TCXOs

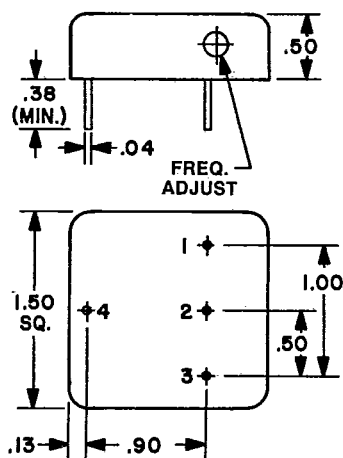
Temperature Compensated Crystal Oscillators

FEATURES

- TTL: 12 KHz—20 MHz
- CMOS: 300 Hz—15 MHz
- Small packages

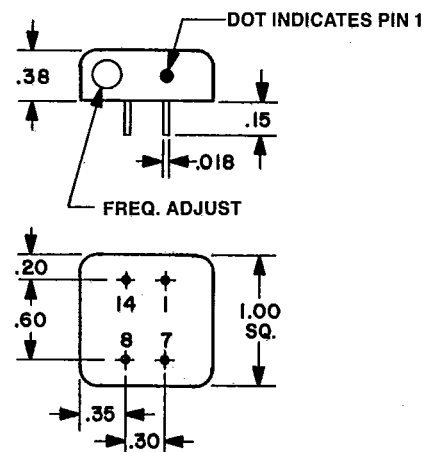


CO-231 SERIES
CO-236 SERIES



Pin	Function
1	0 volts, case
2	Case
3	B+
4	Output

CO-532 SERIES



Pin	Function
1	Case
7	0 volts, common
8	Output
14	B+

TCXOs

		TTL		CMOS
		Lowest price	low profile; dip pin configuration	
FREQUENCY		12 kHz-20 MHz	32 kHz-20 MHz	300 Hz-15 MHz
STABILITY	Temperature			
	(Temp. Range A) +15°C to +35°C:	CO-231A57: $\pm 5 \times 10^{-7}$	CO-532A57: $\pm 5 \times 10^{-7}$	CO-236A57: $\pm 5 \times 10^{-7}$
	(Temp. Range B) 0°C to +50°C:	CO-231B16: $\pm 1 \times 10^{-6}$	CO-532B16: $\pm 1 \times 10^{-6}$	CO-236B16: $\pm 1 \times 10^{-6}$
	(Temp. Range C) 0°C to +70°C:	CO-231C36: $\pm 3 \times 10^{-6}$	CO-532C36: $\pm 3 \times 10^{-6}$	CO-236C36: $\pm 3 \times 10^{-6}$
	(Temp. Range D) -20°C to +70°C:	CO-231D56: $\pm 5 \times 10^{-6}$	CO-532D56: $\pm 5 \times 10^{-6}$	CO-236D56: $\pm 5 \times 10^{-6}$
	(Temp. Range E) -40°C to +75°C:	CO-231E15: $\pm 1 \times 10^{-5}$	CO-532E15: $\pm 1 \times 10^{-5}$	CO-236E15: $\pm 1 \times 10^{-5}$
	(Temp. Range F) -55°C to +85°C:	CO-231F25: $\pm 2 \times 10^{-5}$	CO-532F25: $\pm 2 \times 10^{-5}$	CO-236F25: $\pm 2 \times 10^{-5}$
	Short Term (Allan Variance)	1×10^{-9} per second under constant conditions		
	Frequency vs Supply	1×10^{-7} per percent change in supply voltage		
OUTPUT	Level	TTL Compatible (drives 10 TTL loads)		CMOS compatible
SUPPLY	Voltage	5 Vdc $\pm 5\%$	5 Vdc $\pm 5\%$	12 Vdc $\pm 5\%$ (9-15 Vdc optional)
	Current	4-20 MHz: <30 mA <4 MHz: 40-80 mA	8-20 MHz: <30 mA <8 MHz: 40-80 mA	3-10 mA depending upon frequency
FREQUENCY ADJUSTMENT		screwdriver adjustment, settable to 1×10^{-6}		
SIZE/CONFIGURATION		1½" x 1½" x ½" (38 x 38 x 13 mm) pcb mount housed in metal can with epoxy base	1" x 1" x .395" (26 x 26 x 10 mm) DIP compatible pin configuration housed in metal can with epoxy base	1½" x 1½" x ½" (38 x 38 x 13 mm) pcb mount housed in metal can with epoxy base