

LOW PROFILE PC Board Mount OCXOs

FEATURES:

- CO-740: 2" x 2" x 1/2"; pin for pin compatible with our CO-711 series
- CO-750: 1 1/2" x 1 1/2" x 1/2"
- CO-760: 1" x 1" x 1/2"



Contact factory for better temperature stability requirements



CO-740 SERIES 2" x 2" x 1/2" Sinewave Output		CO-750 SERIES 1 1/2" x 1 1/2" x 1/2" Sinewave Output		CO-760 SERIES 1" x 1" x 1/2" 5V Logic	
FREQUENCY	5 MHz - 25 MHz AT cut Crystal	5 MHz - 25 MHz SC/IT cut Crystal	5 MHz - 25 MHz AT cut Crystal	5 MHz - 25 MHz SC/IT cut Crystal	5 MHz - 25 MHz AT cut Crystal
STABILITY (Temp Range A) +15°C to +35°C (Temp Range B) 0°C to +50°C (Temp Range D) -20°C to +70°C (Temp Range E) -40°C to +75°C	A58: ±5 x 10 ⁻⁸ A18: ±1 x 10 ⁻⁸	A28: ±2 x 10 ⁻⁸ A59: ±5 x 10 ⁻⁹	A58: ±5 x 10 ⁻⁸ A18: ±1 x 10 ⁻⁸	A28: ±2 x 10 ⁻⁸ A59: ±5 x 10 ⁻⁹	A17: ±1 x 10 ⁻⁷
	B17: ±1 x 10 ⁻⁷ B28: ±2 x 10 ⁻⁸	B58: ±5 x 10 ⁻⁸ B18: ±1 x 10 ⁻⁸	B17: ±1 x 10 ⁻⁷ B28: ±2 x 10 ⁻⁸	B58: ±5 x 10 ⁻⁸ B18: ±1 x 10 ⁻⁸	B27: ±2 x 10 ⁻⁷
	D27: ±2 x 10 ⁻⁷ D58: ±5 x 10 ⁻⁸	D17: ±1 x 10 ⁻⁷ D28: ±2 x 10 ⁻⁸	D27: ±2 x 10 ⁻⁷ D58: ±5 x 10 ⁻⁸	D17: ±1 x 10 ⁻⁷ D28: ±2 x 10 ⁻⁸	D57: ±5 x 10 ⁻⁷ (±2.5 x 10 ⁻⁷ 0/70°C avail. on special order)
	E57: ±5 x 10 ⁻⁷ E17: ±1 x 10 ⁻⁷	E27: ±2 x 10 ⁻⁷ E58: ±5 x 10 ⁻⁸	E57: ±5 x 10 ⁻⁷ E17: ±1 x 10 ⁻⁷	E27: ±2 x 10 ⁻⁷ E58: ±5 x 10 ⁻⁸	N/A
	Aging Rate	CO-744: 1 x 10 ⁻⁶ /day 2 x 10 ⁻⁶ /year CO-747: 1 x 10 ⁻⁹ /day 3 x 10 ⁻⁷ /year	CO-748S: 5 x 10 ⁻¹⁰ /day 1 x 10 ⁻⁷ /year (5 x 10 ⁻⁸ /year optional)	CO-754: 1 x 10 ⁻⁶ /day 2 x 10 ⁻⁶ /year CO-757: 1 x 10 ⁻⁹ /day 3 x 10 ⁻⁷ /year	CO-758S: 5 x 10 ⁻¹⁰ /day 1 x 10 ⁻⁷ /year (5 x 10 ⁻⁸ /year optional)
vs Supply	5 x 10 ⁻⁹ per percent	2 x 10 ⁻⁹ per percent	5 x 10 ⁻⁹ per percent	2 x 10 ⁻⁹ per percent	1 x 10 ⁻⁷ per percent
Short Term (Allan Variance)	5 x 10 ⁻¹¹ /second	1 x 10 ⁻¹¹ /second	5 x 10 ⁻¹¹ /second	1 x 10 ⁻¹¹ /second	1 x 10 ⁻⁹ /second
OUTPUT / SUPPLY VOLTAGE		Output Std: >0.5Vrms/50Ω (+7 dBm) R: >1.0Vrms/50Ω (+13 dBm) J: **HCMOS/TTL Supply±5% * +15Vdc * +15Vdc * +15Vdc & +5Vdc *Any voltage in 12-24 Vdc range optional ** Drives 3 TTL loads, 10LS TTL loads or HCMOS (output is from HCMOS gate)			Output **Std: HCMOS/TTL +5Vdc ±5% **Drives 3 TTL loads, 10LS TTL loads or HCMOS (output is from HCMOS gate)
Harmonics (Sinewave Output)		>20 dB below desired output. If internal multiplication is used, sub-harmonics are also -20 dBc.			N/A
Input Power		5 watts at turn-on; <2.5 watts stabilized @ 25°C Higher power required for -20°C to +70°C and lower power needed for 0°C to 50°C.			3 watts at turn-on; <1 watt stabilized at 25°C
PHASE NOISE (typical)(Sinewave Output 5-12 MHz)		Phase Noise -105 dBc/Hz -135 dBc/Hz -145 dBc/Hz -148 dBc/Hz -150 dBc/Hz	Phase Noise -115 dBc/Hz -140 dBc/Hz -145 dBc/Hz -148 dBc/Hz -150 dBc/Hz	Phase Noise -105 dBc/Hz -135 dBc/Hz -145 dBc/Hz -148 dBc/Hz -150 dBc/Hz	Phase Noise -115 dBc/Hz -140 dBc/Hz -145 dBc/Hz -148 dBc/Hz -150 dBc/Hz
FREQUENCY ADJUST		Mechanical: Range for 10 years of aging settable to 1 x 10 ⁻⁸ (5 x 10 ⁻⁹ with SC). Electrical: VCXO control "V" optional.		10 x10 ⁻⁶ minimum range for 0 to +6V control via external potentiometer	2 x10 ⁻⁶ minimum range for 0 to +6V control via external potentiometer
CONFIGURATION/ MECHANICAL PACKAGE (see page 52)		2" x 2" x 1/2", pins for PCB mounting (51 x 51 x 12.7 mm)		1" x 1" x 1/2", pins for PCB mounting (25.4 x 25.4 x 12.7 mm)	
ENVIRONMENTAL		see general environmental specifications on page 98			
HOW TO ORDER		see page 52			

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HOW TO ORDER

CO-7 at

Size: 4 = 2" x 2" x 1/2"
 5 = 1 1/2" x 1 1/2" x 1/2"
 6 = 1" x 1" x 1/2"

Aging: 4 = 1 x 10⁻⁹/day, 2 x 10⁻⁹/year
 6 = 3 x 10⁻⁹/day, 1 x 10⁻⁹/year
 7 = 1 x 10⁻⁹/day, 3 x 10⁻⁷/year
 8S = 5 x 10⁻¹⁰/day, 1 x 10⁻⁷/year

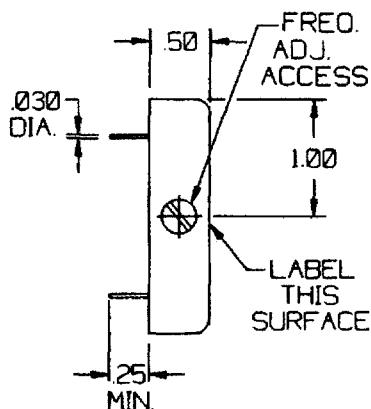
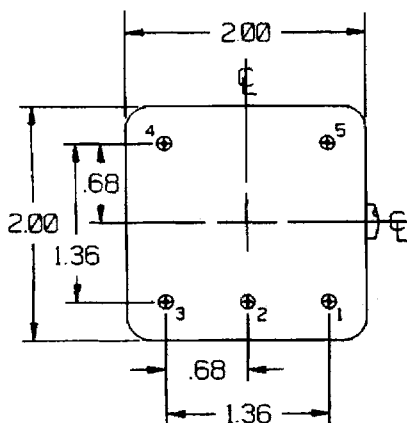
Frequency
 Output option (R, J)
 (Leave blank if option not applicable)

Temperature Stability (e.g. B28 = ±2 x 10⁻³ over 0°C to +50°C)

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-757B28 at 5 MHz except 12 Vdc supply).

OUTLINE/INSTALLATION DRAWINGS

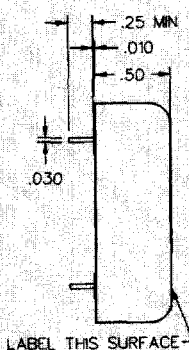
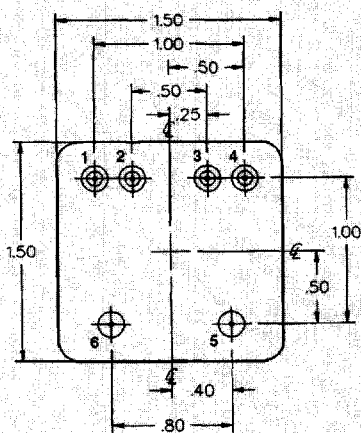
CO-740 SERIES



EXT +6V

TERM	FUNCTION
1	VCXO IN (when applicable)
2	+5V for logic, N/C for sine
3	RF OUT
4	CASE, RF RET. 0V
5	SUPPLY (+)

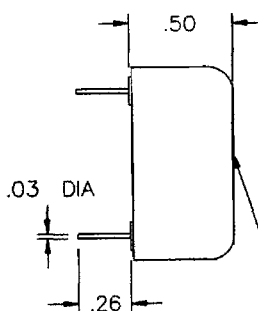
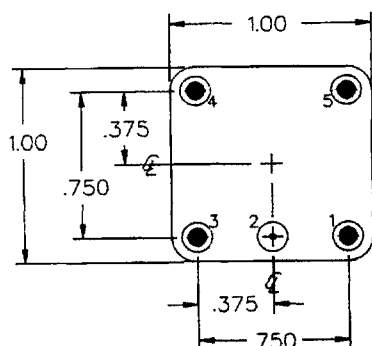
CO-750 SERIES



EXT +6V

PIN	FUNCTION
1	RF OUTPUT
2	VCXO INPUT
3	+5V for logic; N/C for sine
4	SUPPLY (+)
5	0V. CASE
6	0V. CASE

CO-760 SERIES



EXT +5V

PIN	FUNCTION
1	RF OUTPUT
2	0V. CASE
3	VCXO INPUT
4	N/C
5	SUPPLY (+)

Markings do not appear on oscillators; they are for reference only. Dimensions are in inches. Case dimension tolerances are ± .02"