

● FEATURES

- WIDE FREQUENCY RANGE
- EXCELLENT FOR 16 AND 32 BIT MPU'S
- 3-STATE FUNCTION

SERIES CO15 AND CO19

● SPECIFICATIONS

SERIES		CO15	CO19
PACKAGE		14 PIN DIP	8 PIN DIP
FREQUENCY RANGE		500 KHz TO 100.00 MHz	500 KHz TO 100.00 MHz
FREQUENCY STABILITY†		CO15100 : ±100 PPM CO15050 : ±50 PPM CO15025 : ±25 PPM	CO19100 : ±100 PPM CO19050 : ±50 PPM CO19025 : ±25 PPM
OPERATING TEMPERATURE RANGE		0° C TO + 70° C STANDARD -40° C TO + 85° C EXTENDED	0° C TO + 70° C STANDARD -40° C TO + 85° C EXTENDED
STORAGE TEMPERATURE RANGE		-55° C TO +125° C	-55° C TO +125° C
INPUT	VOLTAGE	+5 VDC ±0.5 VDC	+5 VDC ±0.5 VDC
	CURRENT	60 mA MAX	60 mA MAX
OUTPUT	SYMMETRY	40 TO 60% NORMAL 45 TO 55% TIGHT	40 TO 60% NORMAL 45 TO 55% TIGHT
	RISE AND FALL TIME (0.5 - 4.5 VDC)	10 ns MAX - 500 KHz TO 25.00 MHz 6ns MAX - 25.10 MHz TO 70.00 MHz 4 ns MAX - 70.1 MHz TO 100.00 MHz	10 ns MAX - 500 KHz TO 25.00 MHz 6ns MAX - 25.10 MHz TO 70.00 MHz 4 ns MAX - 70.1 MHz TO 100.00 MHz
	LOGIC "0" LEVEL	+0.5 VDC MAX (10% VDD)	+0.5 VDC MAX (10% VDD)
	LOGIC "1" LEVEL	+4.5 V MIN (90% VDD)	+4.5 V MIN (90% VDD)
	LOAD††	1-10 TTL OR 15 pF CMOS	1-10 TTL OR 15 pF CMOS
ENABLE/DISABLE FUNCTION	CONTROL (PIN 1)	HIGH OR OPEN LOW	HIGH OR OPEN LOW
	OUTPUT (PIN 8 OR 5)	ENABLE : HIGH DISABLE (LOW) : HIGH IMPEDANCE	ENABLE : HIGH DISABLE (LOW) : HIGH IMPEDANCE

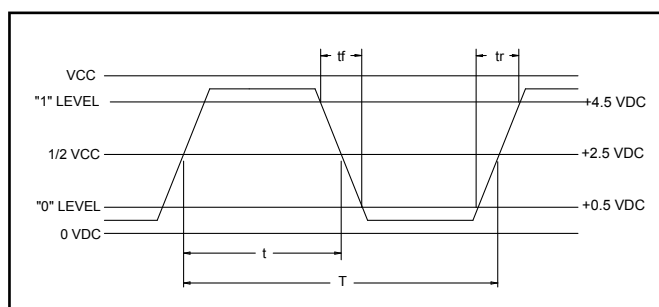


† FREQUENCY STABILITY INCLUSIVE OF ROOM TOLERANCE,
 FREQUENCY STABILITY OVER TEMPERATURE, 10% POWER SUPPLY VARIATION, AGING, SHOCK, AND VIBRATION
 †† +3.3 VOLT VERSION IS AVAILABLE. CONSULT RALTRON FOR SPECIFICATIONS
 ††† OUTPUT LOADS ALSO AVAILABLE AT 15 pF, 30 pF AND 50 pF. CONSULT RALTRON FOR SPECIFICATIONS

● ENVIRONMENTAL AND TECHNICAL CONDITIONS

ENVIRONMENTAL	
TEMPERATURE CYCLE	MIL-STD 883, METHOD 1010, 10 CYCLES -20° C TO 85° C
SHOCK	MIL-STD-202, METHOD 213, TEST CONDITION C
VIBRATION	MIL-STD-202, METHOD 204, TEST CONDITION A
RESISTANCE TO SOLDERING HEAT	MIL-STD-202, METHOD 210, TEST CONDITION B
HUMIDITY	85% RELATIVE HUMIDITY AT 85° C 250 HOURS
MECHANICAL	
GROSS LEAK TEST	MIL-STD-883, METHOD 1014, TEST CONDITION C
FINE LEAK TEST	MIL-STD-883, METHOD 1014, TEST CONDITION A
TERMINAL STRENGTH	MIL-STD-202, METHOD 211, TEST CONDITION A AND C
MARKING INK	EPOXY, HEAT CURED.
MOISTURE RESISTANCE	MIL-STD 202, METHOD 106, OMIT STEP 7B
SOLDERABILITY	MIL-STD-202, METHOD 208, 95% COVERAGE
SOLVENT RESISTANCE	MIL-STD-202, METHOD 215

● OUTPUT WAVEFORM



● PART NUMBERING SYSTEM

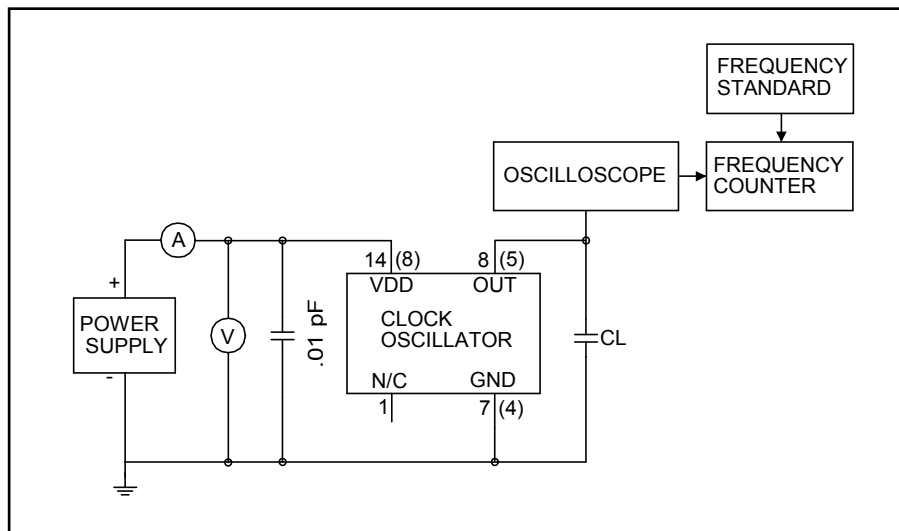
SERIES		FREQUENCY STABILITY		-	FREQUENCY	-	EXTENDED TEMPERATURE	-	SYMMETRY		-	OPTIONS	
CO15 CO19	(14 PIN DIP) (8 PIN DIP)	100 050 025	±100 PPM ±50 PPM ±25 PPM		IN MHz		EXT		T	TIGHT SYMMETRY		TR GW 3.3	TAPE AND REEL* GULL WING +3.3 V

EXAMPLE: CO15100-12.000-EXT, CO19050-45.000-T

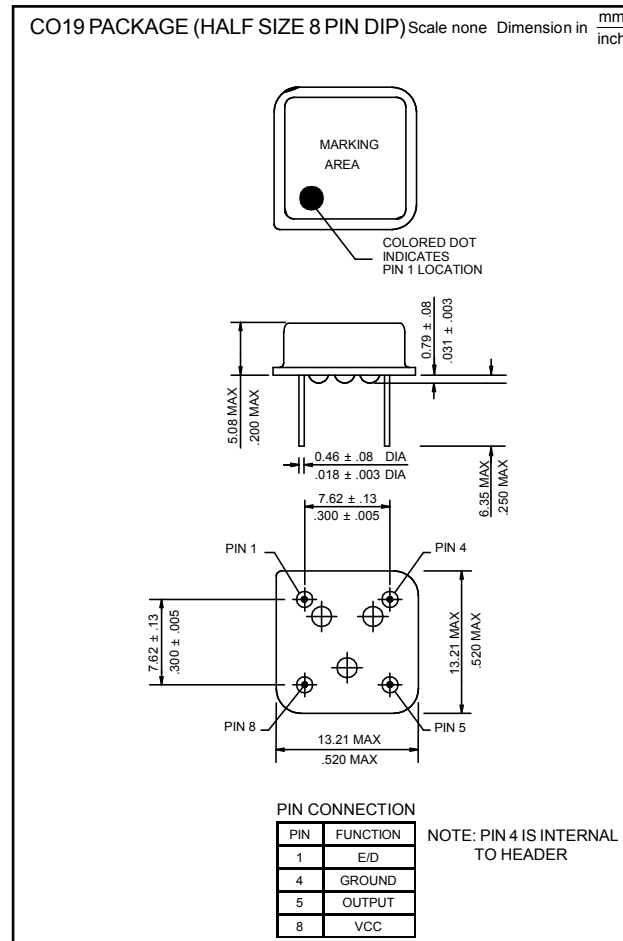
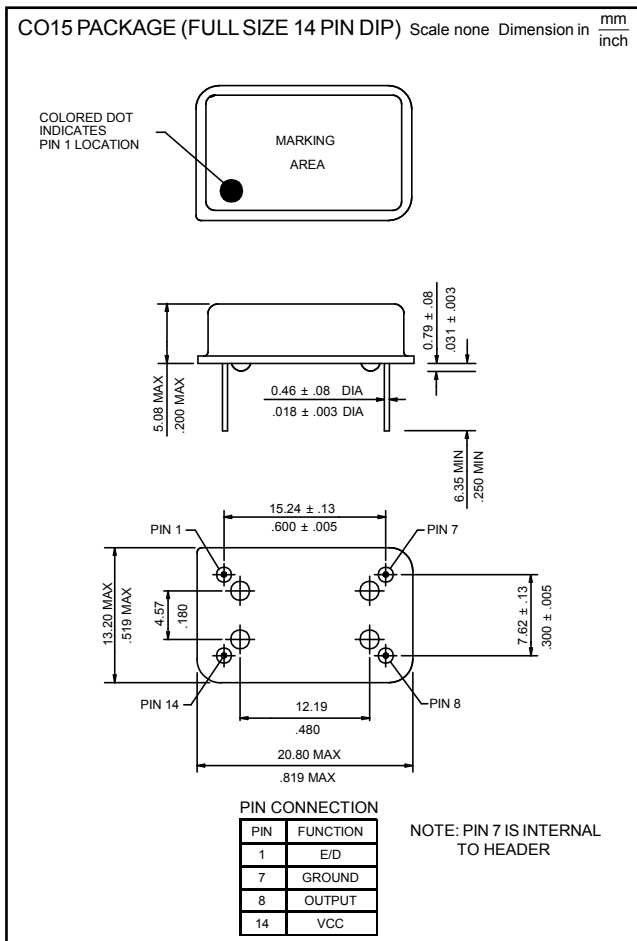
* Available for Gull Wing only

SERIES CO15 AND CO19

● TEST CIRCUIT



● OUTLINE DRAWINGS



● PACKAGING

14 PIN DIP: 25 PIECES PER PLASTIC TUBE

8 PIN DIP: 40 PIECES PER PLASTIC TUBE