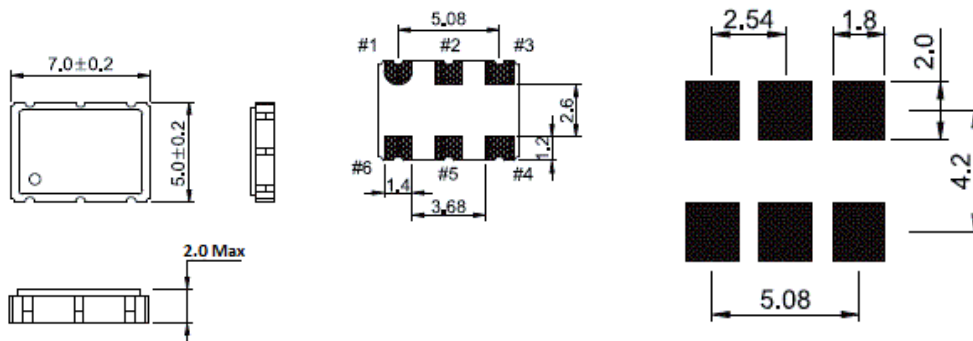# CRESCENT
FREQUENCY PRODUCTS

CVM57C Series Dual Frequency VCXO

5x7 Ceramic 6 Pad
RoHS Compliant
CMOS
2.5V or 3.3V
10.000MHz to
250.000MHz
Single or Dual Frequency

Dimensions are in millimeters. Dot indicates pin one location.

Land Pattern

Electrical Specifications

Frequency Range		10.000MHz to 250.000MHz
Operating Temperature Range		0°C to 70°C, -20° to 70°C or −40° to 85°C
Storage Temperature Range		-55°C to 125°C
Supply Voltage	VDD ±5%	2.5 Or 3.3
Waveform		CMOS
Supply Current	2.5VDC 3.3VDC	20mA Typical 25mA Typical
Load	2.5VDC 3.3VDC	15pF HCMOS 10 TTL Gates or 30pF HCMOS
Frequency Tolerance / Stability	Inclusive of Operating Temp Range, Supply Voltage and Load	10ppm,20ppm, 25ppm, 50ppm Or 100ppm
Duty Cycle	50% of Waveform	50 ± 5%
Rise Fall Time		4nSecond Max
Period Jitter (RMS)		<2.5pSecond Max
Phase Jitter	12KHz to 20MHz	<1.0pSecond Typical
Startup Time		10mSeconds Max
Vol		10% Vdd Max
Voh		90% Vdd Min
Pullability		±100ppm
Linearity		10%
Tri-State	VIH≥70% of VDD VIH≤30% of VDD	Enables Output Disables Output: High Impedance
Tristate Current Consumption	Disables	16mA
Aging		±5.0ppm First Year

Part Marking	
Line #1	CVM57C
Line #2	XX.XXX M XX.XXX = Frequency (5 Digits Max + Decimal) M = Frequency Unit Of Measure (MHz)
Line #3	XX YY ZZ XX = Crescent Manufacturing Identifier YY = Last Two Digits of Year ZZ = Week of Year

Pad Connections	
Pad 1	VC
Pad 2*	Tristate or Frequency Select
Pad 3	Ground
Pad 4	Output
Pad 5	No Connect
Pad 6	Supply Voltage

*No Tristate With Dual Frequency

Single Frequency Reference Table		
Pin 1	Pin 2	Corresponding Frequency
VC	Tristate	Frequency 1

Dual Frequency Reference Table		
Pin 1	Pin 2	Corresponding Frequency
VC	Logic "0"	Frequency 1
VC	Logic "1"	Frequency 2

Phase Noise	
Offset Frequency	70.000MHz
100Hz	-88dBc/Hz
1KHz	-115dBc/Hz
10KHz	-120dBc/Hz
100KHz	-125dBc/Hz
1MHz	-130dBc/Hz
10MHz	-145dBc/Hz

Mechanical / Environmental	
Shock	MIL-STD-883, Method 2002 Cond B
Solvent Resistance	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003
MSL	Level 1 Per IPC/JEDEC J-STD 20
Gross Leak Test	MIL-STD-883, Method 1014, Cond C
Fine Leak Test	MIL-STD-883, Method 1014, Cond A2
Vibration	MIL-STD-883, Method 2007, Cond A

Part Numbering Guide

CVM57C 3 A 3 -25.000MHz-T

Series
CVM57C

Supply Voltage
2 = 2.5VDC
3 = 3.3VDC

Tolerance / Stability
A = 100ppm
B = 50ppm
C = 25ppm
D = 20ppm
E = 10ppm

Packaging Options
Blank = Bulk
T = Tape & Reel

Center Frequency
10.000MHz to 250.000MHz

Operating Temperature Range
2 = 0°c to 70°C
3 = -20° to 70°C
4 = -40° to 85°C
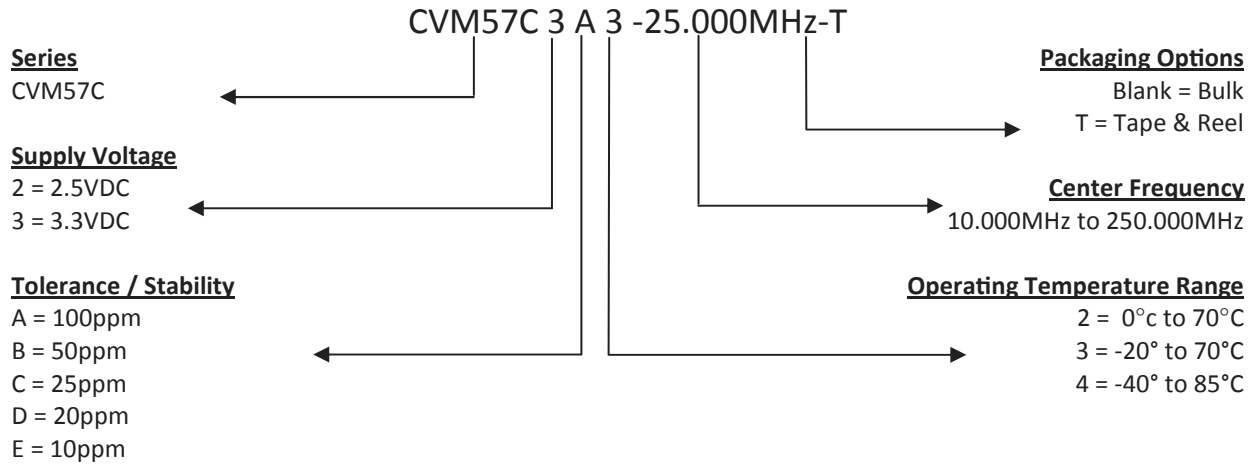
Test Set Up
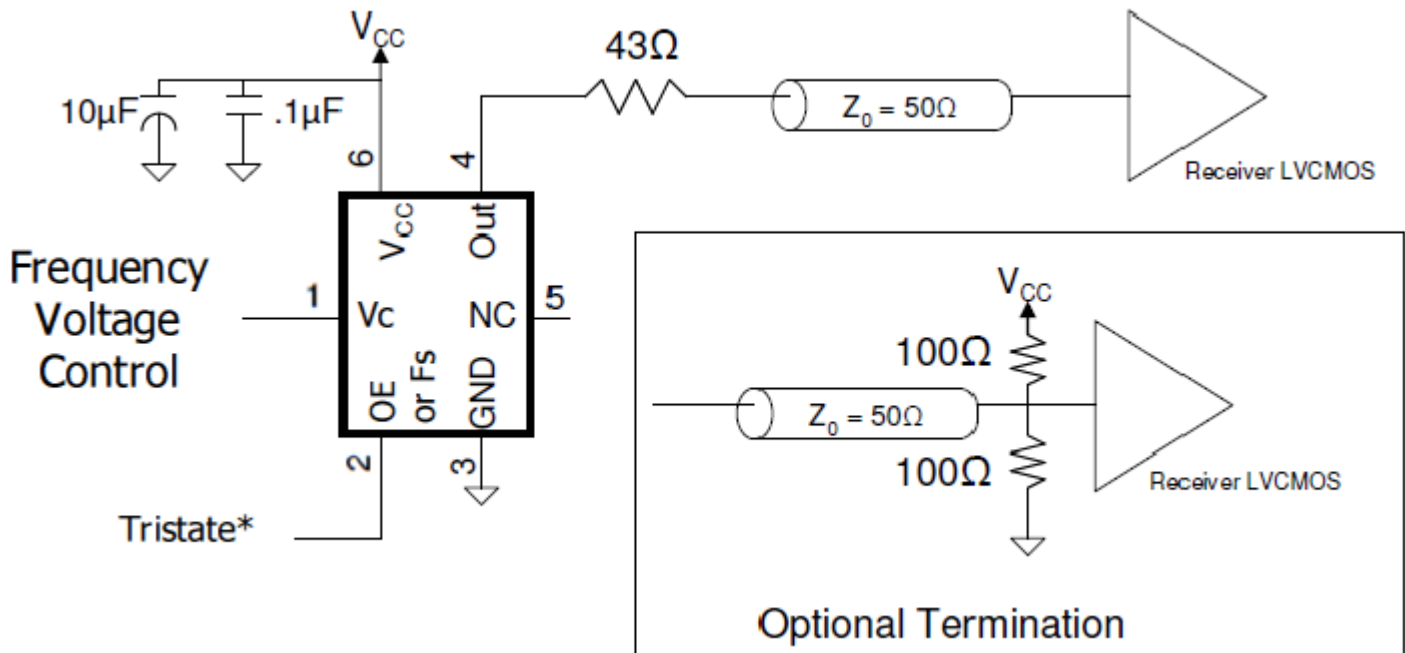
*Pin 2 is Frequency Select With Dual Frequency