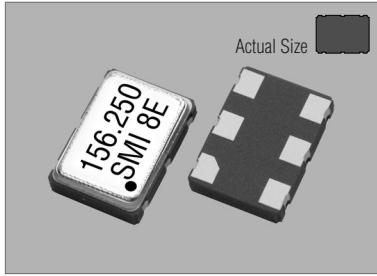


# Low Voltage Positive Emitter Coupled Logic VCXO

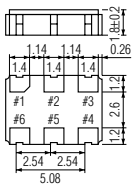
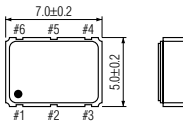
57SMOVH (+3.3V FIXED LVPECL VCXO)

STANDARD SMD VCXO

57SMOVH



57SMOVH

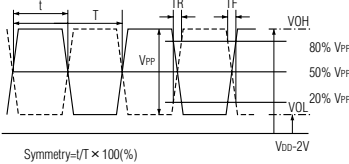


PIN	CONNECTION
1	Vcontrol
2	"L" OPEN or "H"
3	GND
4	Z OUTPUT
5	Z C-OUTPUT
6	VDD

Z : high impedance

## OUTPUT WAVEFORM(1)

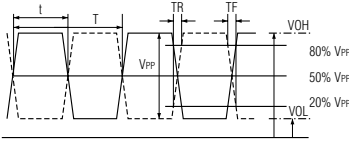
Termination : 50 Ω impedance matching



Symmetry=( $T_F \times 100\%$ )

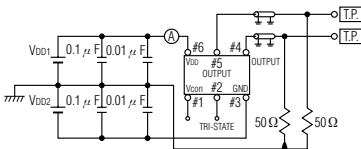
## OUTPUT WAVEFORM(2)

Termination : high impedance probes

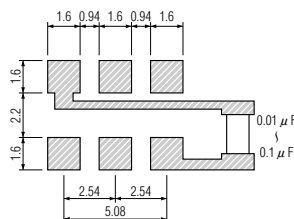


Symmetry=( $T_F \times 100\%$ )

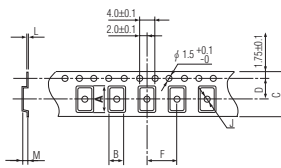
## TEST CIRCUIT



## SOLDERING PATTERN



## TAPE SPECIFICATIONS



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
7.5	5.5	16.0	7.5	8.0	2.0	0.3	2.2	245	1000pcs

## STANDARD SPECIFICATIONS

LVPECL VCXO

Item	Specifications
Generic part number	57SMOVH
Frequency range	65.000 MHz to 166.000 MHz
Frequency stability (0°C to +70°C)	57SMOVH(B) : ±50 ppm 57SMOVH(C) : ±30 ppm 57SMOVH(D) : ±25 ppm
over all conditions	Vcon = +1.65V
Frequency pulling range	±100ppm min. (VCON = +1.65V ±1.5V)
Frequency change vs. input voltage	±5.0ppm max. (VDD = +3.3V DC ±5%)
Operating Conditions	
Operating temperature	0°C to +70°C (standard) -40°C to +85°C (W)
Input voltage (VDD)	+3.3V DC ±5%
Control voltage (Vcon = Pin#1)	+1.65V DC ±1.5V
Tri-state control voltage (Pin#2)	VIH : 70%VDD min. VIL : 30%VDD max.
Absolute Max. Ratings	
Supply voltage	-0.5V to +5.0V DC
Storage temperature	-50°C to +125°C
Input current (Pin#2 = Open or VIH)	100 mA max.
Tri-state current (Pin#2 = VIL)	20 mA max.
Output (0°C to +70°C)	
Symmetry (at crossing point)	40% to 60%
Rise and fall times	1 ns max. (20% to 80% of amplitude)
"0" level	VOL : 1.745V max.
"1" level	VOH : 2.215V min.
Load	50 Ω into VDD -2V
Enable / Disable delay time	200 ns max.
Startup time	10 ms max.
Frequency linearity	10% max.
Frequency slope	Positive
SSB phase noise	-130 dBc/Hz, Typical at 1kHz offset
RMS jitter (12 kHz to 20 MHz band)	1 ps max.
Aging	±5 ppm max. at +25°C ±3°C for first year
Reflow condition	+250°C ±10°C for 10 seconds +170°C ±10°C for 1 to 2 minutes (preheating)

## PACKAGE DATA

Item	Package	57SMOVH
Lid		Metal
Base		Ceramic
Sealing		Seam
Terminal		Tungsten (metalized)
Terminal plating		Gold / Nickel (surface) / (under)
RoHS		Compliant (Pb-free)