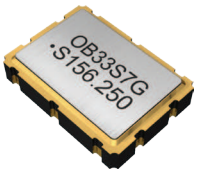
LVDS DIFFERENTIAL OUTPUTS CRYSTAL OSCILLATOR

OSC57B



Applications

- SONET / SDH / Gbits / Ethernet / IEEE1394 / Fibre Channel

Features

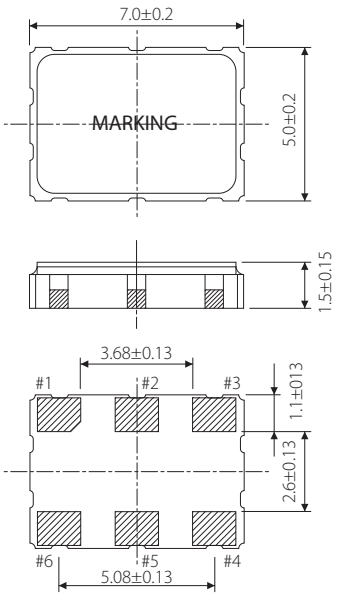
- Ceramic package / Dimensions (7.0×5.0×1.5)
- Low Jitter
- Low phase jitter / 0.3ps typ. /12KHz to 20MHz offset
- LVDS differential outputs with Tri-state function

Specifications

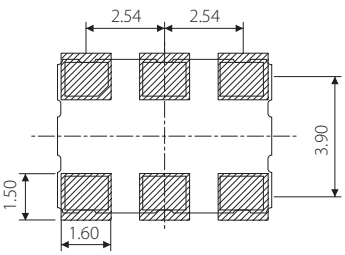
Model	OSC57B
Frequency range	80.000～160.000 MHz
Nominal Frequency (MHz)	100, 106.25, 108, 125, 133, 155.52, 156.25
Storage temperature range	-40～＋85℃
Operating temperature range	-10～＋70℃
Frequency stability	±30×10^{-6} , ±55×10^{-6} , ±100×10^{-6}
Power supply voltage (Vcc)	+2.5V, +3.3V DC ±5%
Input voltage level	V_{IL}: 0.3Vcc max. / V_{IH}: 0.7Vcc min.
Current consumption	70mA max. (50mA typ.) / 30uA max. (Standby)
Output level	LVDS
Load	100Ω (OUT-OUTN)
Output voltage level	V_{OL}: 0.9V min. / V_{OH}: 1.6V max.
Differential output voltage	0.33V typ.
Offset voltage	1.25V typ.
Rise & Fall time	1ns max. / 20%～80%Output swing level
Duty cycle	45～55% at 50% output swing level
Jitter	RMS 1σ 5ps max. (3ps typ.)
Phase Jitter	RMS 1ps max. (0.3ps typ.) / 12kHz to 20MHz offset
Tri-state Function	#1: Floating or "H"→Output enable / #1: "L"→Output disable (Hi-Z)

Package quantity: 1,000pcs max./Reel.

Outline and Dimensions [unit:mm]



Example of a Terminal Land Pattern



Terminal	Connection
#1	Tri-state
#2	N.C.
#3	GND
#4	OUT
#5	OUTN
#6	Vdd

Tri-state Function

Tri-state Pin	Output
High or Floating	Active
Low	Hi-impedance