

OnSpec Oscillators



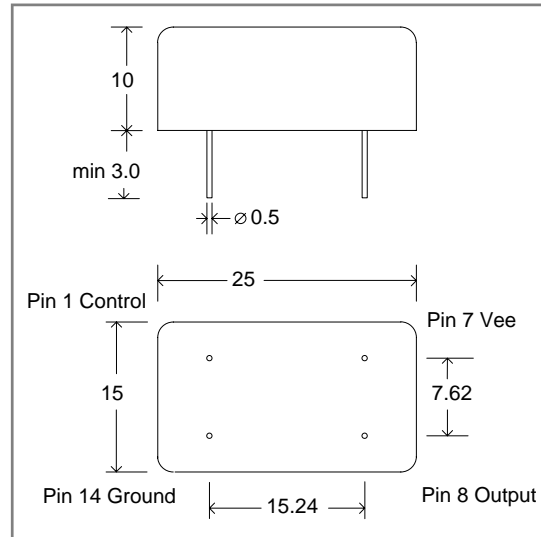
OSO-00351-01 100k series ECL VCXO

Emitter Coupled Logic (ECL), 100k series
Voltage Controlled Oscillators up to 500 MHz
Containing PLL multipliers

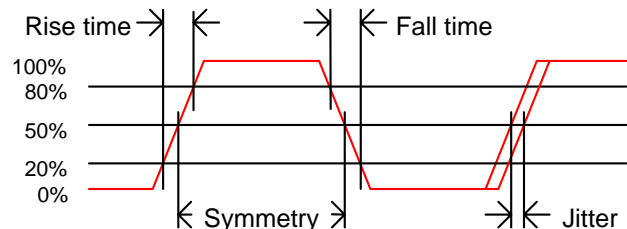
100k Series ECL Output
(10kH series available)

Negative supply, Single Output
3.3 V - 5 V supply

Frequency	50 - 500 MHz
Pulling Range	± 150 ppm
Control Voltage	0 V to +6.0 V
Overall Stability	± 30 ppm
Output	100k series ECL
V_{OH}	-1.035 V .. -0.870 V
V_{OL}	-1.830 V .. -1.620 V
Temperature	0 .. +70°C
Rise & Fall times	1.2 ns max
20%..80% Symmetry	55/45..45/55%
Cycle-to-Cycle Jitter	30 ps max
Supply Voltage (V_{EE})	-3.0 .. -5.5 V
Supply Current	200mA max



Timing Waveforms



The oscillator characteristics are specified with the outputs terminated with 50Ω to -2.0 V.

All voltages are referred to the ground pin

The ground pin is connected to the case.

These oscillators use Phase Locked Loop (PLL) frequency multipliers, where the output comes from a Voltage Controlled Oscillator (VCO) that is not a crystal oscillator. The VCO is corrected by comparing its frequency to that of the crystal oscillator.

As the output comes from a VCO, the phase noise is not as good as for oscillators with no multipliers or other types of multipliers.

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