

- ▶ LVDS
- ▶ 7 x 5 mm Footprint
- ▶ Low Jitter
- ▶ Pb Free/RoHS Compliant

# ECS-LVDS25/LVDS33 SMD LVDS OSCILLATOR

ECS-LVDS25 (2.5V) and ECS-LVDS33 (3.3V) Low Voltage Differential Signaling SMD LVDS oscillators.

## OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-LVDS25 (+2.5V)			ECS-LVDS33 (+3.3V)			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
Frequency Range		80.0		300.0	80.0		300.0	MHz
Operating Temperature	Standard	0		+70	0		+70	°C
	Extended (N Option)	-40		+85	-40		+85	°C
Storage Temperature		-50		+125	-50		+125	°C
Supply Voltage	VDD	+2.375	+2.5	+2.625	+3.135	+3.3	+3.465	VDC
Frequency Stability *	Option A			± 100			± 100	ppm
	Option B			± 50			± 50	ppm
	Option C			± 25			± 25	ppm
Input Current	Pin 1 open or VIH			70			70	mA
Stand-by Current	Pin 1 = VIL			30			30	µA
Output Symmetry	at Crossing point			45/55			45/55	%
Rise and Fall Times	20% VDD to 80% level			1			1	ns
"0" level	VOL		+1.10			+1.10		V
"1" level	VOH		+1.43			+1.43		V
Output Load	100Ω (Out-Outn)							
Differential output voltage			0.33			0.33		V
Offset voltage			1.25			1.25		V
Disable delay time				200			200	ns
Enable/Startup time				10			10	ms
RMS Jitter	12 KHz to 20 MHz band			1			1	ps
Aging (first year)	at +25°C ±3°C			± 5			± 5	ppm

## DIMENSIONS (mm)

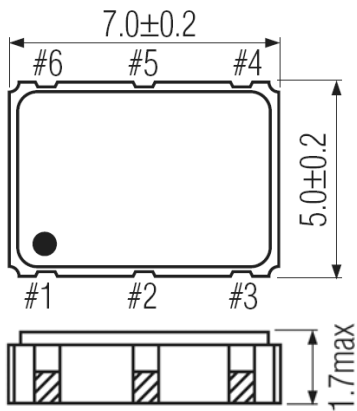


Figure 1) Top, Side and Bottom views

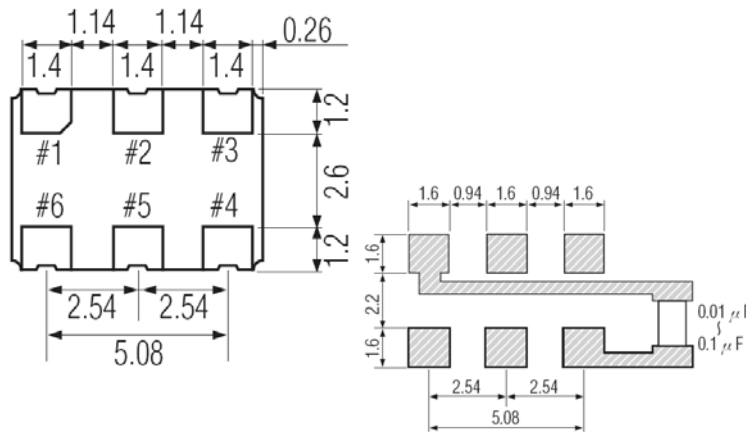


Figure 2) Suggested Land Pattern

Pin Connections	
Pin #1	Tri-State
Pin #2	N.C.
Pin #3	Ground
Pin #4	Output
Pin #5	C-Output
Pin #6	VDD

Tri-State Control Voltage	
Pad 1	Pad 4 & 5
Open	Oscillation
VIH 70% VDD Min	Oscillation
VIL 30% VDD Max	No Oscillation

Note: Internal crystal oscillation to be halted (Pin #1=VIL)

PART NUMBERING GUIDE: Example ECS-LVDS25-1000-A