

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

Request a Sample

## OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

### ECS-LVDS25/LVDS33



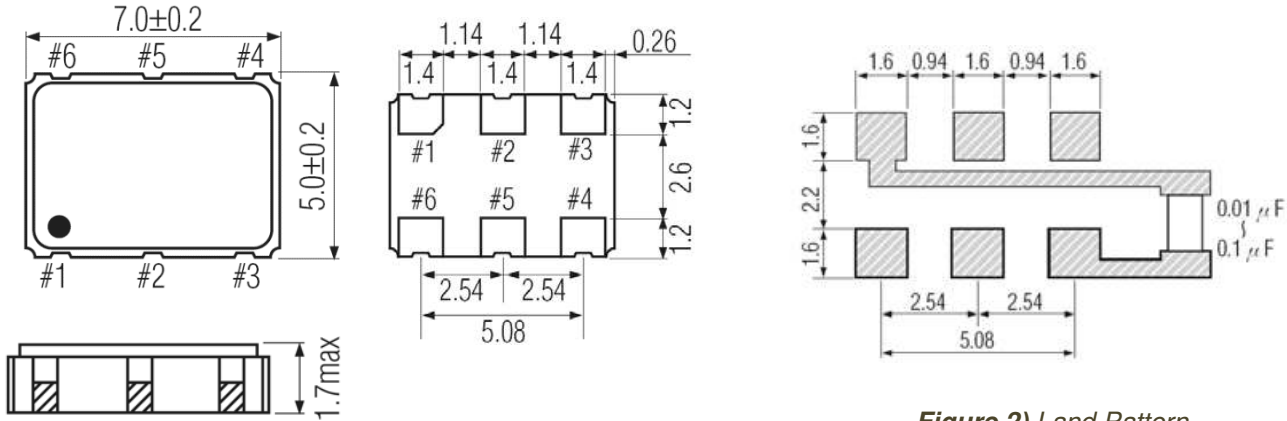
- LVDS
- 7 x 5 mm Footprint
- Low Jitter
- PbFree/RoHS Compliant

Parameters	Conditions	ECS-LVDS25 (+2.5V)			ECS-LVDS33 (+3.3V)			Units
		MIN	TYP	MAX	MIN	TYP	MAX	
<b>Frequency Range</b>		80.0		300.0	80.0		300.0	MHz
<b>Operating Temperature</b>	Standard	0		+70	0		+70	°C
	Extended (N Option)	-40		+85	-40		+85	°C
<b>Storage Temperature</b>		-50		+125	-50		+125	°C
<b>Supply Voltage</b>	VDD	+2.375	+2.5	+2.625	+3.135	+3.3	+3.465	VDC
<b>Frequency Stability*</b>	Option A			±100			±100	PPM
	Option B			±50			±50	PPM
	Option C			±25			±25	PPM
<b>Input Current</b>	Pin 1 Open or VIH			70			70	mA
<b>Stand-by Current</b>	Pin 1 = VIL			30			30	µA
<b>Output Symmetry</b>	at Crossing Point			45/55			45/55	%
<b>Rise and Fall Times</b>	20% VDD to 80% Level			1			1	ns
<b>"0" Level</b>	VOL		+1.10		+1.10			V
<b>"1" Level</b>	VOH		+1.43		+1.43			V
<b>Output Load</b>	100Ω (Out-Outn)							
<b>Differential Output Voltage</b>			0.33		0.33			V
<b>Offset Voltage</b>			1.25		1.25			V
<b>Disable Delay Time</b>				200			200	ns
<b>Enable/Startup Time</b>				10			10	ms
<b>RMS Jitter</b>	12 KHz to 20 MHz band			1			1	ps
<b>Aging (First Year)</b>	@ +25°C ±3°C			±5			±5	PPM

### Part Numbering Guide: Example ECS-LVDS25-1000-A-TR

ECS	Series	Frequency Abbreviations	Stability	Temperature	Packaging
ECS	LVDS25 = +2.5V LVDS33 = +3.3V	1000 = 100 MHz	A = ±100 ppm B = ±50 ppm C = ±25 ppm	Blank = -0 ~ 70°C M = -20 ~ +70°C N = -40 ~ +85°C	TR = Tape & Reel

**Package Dimensions (mm)**



**Figure 1) Top, Side, and Bottom views**

**Figure 2) Land Pattern**

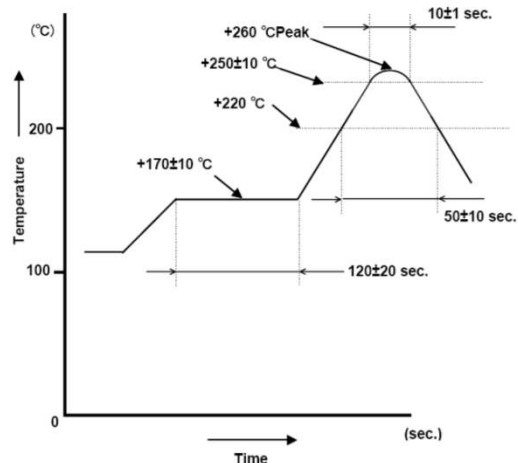
Pin Connections	
#1	Tri-State
#2	N.C.
#3	Ground
#4	Output
#5	C-Output
#6	VDD

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

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

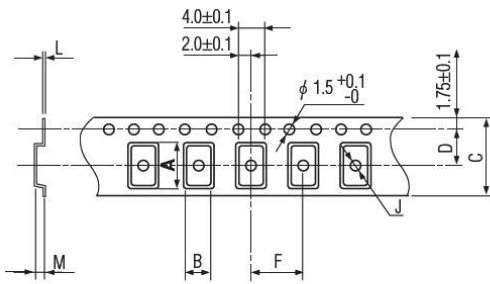
**Frequency Abbreviations**

FREQUENCY MHz	CODE
100.000	1000
106.250	1062.5
125.000	1250
156.250	1562.5
200.000	2000



**Figure 3) Suggested Reflow Profile**

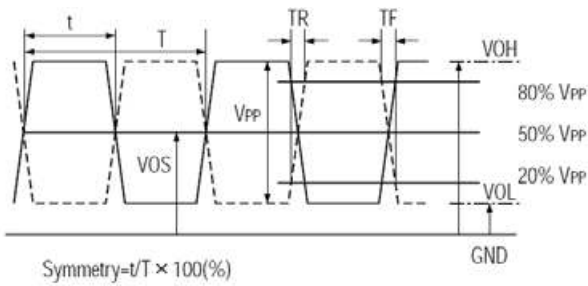
**Tape Dimensions (mm)**



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

Package Data	
Item	Description
Lid	Metal
Base	Ceramic
Sealing	Seam
Terminal	Tungsten (Metalized)
RoHS	Compliant (PbFree)
Plating	Gold/Nickel (Surface)/(Under)

**Figure 4) Pocket Tape Dimensions**



**Figure 5) Output Wave Form**