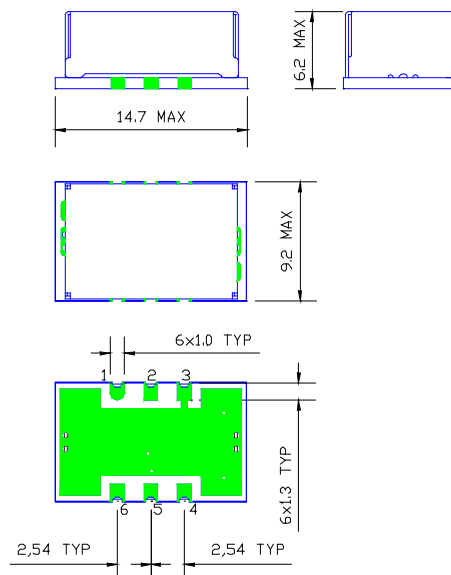


Oscillator Specification: E3317LF(T)

Issue 2, 24th July 2012

Outline: 614

Pad	Function
1	Do not connect
2	Tri-state control
3	Ground
4	Output
5	Do not connect
6	Supply, Vs



Marking shall include:

Model Number
Frequency
Date Code (Year/Week)
Antistatic symbol (Δ indicates pin 1)

Electrical:

Nominal Frequency, Fo	49.152 MHz
Supply Voltage, Vs	3.3 V \pm 10%
Input Current	\leq 8 mA

Output:

Type	CMOS
Load	15pF
Vol	\leq 0.33V
Voh	\geq 2.97V
Rise/Fall time (10-90%)	\leq 8ns
Symmetry (@ 1.65V level)	45 to 55%

Frequency Stability

Calibration @ 25 °C	$\leq \pm 1.0$ ppm ref. to Fo
Temperature, -40 to 85°C	$\leq \pm 1.5$ ppm (ref. to Fmax+Fmin/2)
Supply Voltage, \pm 10%	$\leq \pm 0.2$ ppm ref. to frequency @ 3.3V
Load changes, \pm 5pF	$\leq \pm 0.1$ ppm ref. to frequency @ 15pF
Reflow Soldering	$\leq \pm 1.0$ ppm (allow 48 hours recovery)
Ageing, first year	$\leq \pm 1.0$ ppm
Ageing, 10 years	$\leq \pm 3.0$ ppm
Frequency Adjustment	None

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Tri-state

Pad 2 open circuit or $>0.6V_s$

Output enabled

Pad 2 $< 0.2V_s$

Output in tri-state mode

When in tri-state mode, the output stage is disabled but the oscillator and compensation circuit are still active (current consumption $<1.5mA$).

Phase Noise @ 1 kHz offset

$\leq -115 \text{ dBc/Hz}$

Environmental:

Vibration IEC 60068-2-6 Test Fc, 10-60Hz, 1.5mm displacement, 60 – 2000Hz at 98.1 ms^{-2} , 30 minutes in each of three mutually perpendicular axes at 1 octave per minute.

Shock IEC 60068-2-27 Test Ea, 980ms^{-2} acceleration for 6ms duration, 3 shocks in each direction along three mutually perpendicular axes.

Soldering SMD product suitable for Convection Reflow soldering. Peak temperature 230°C . Maximum time above 200°C , 90 secs.

RoHS Part number with suffix 'LF' are fully compliant with the European Union directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment. Note parts are suitable for assembly using both Lead-free solders and Tin/Lead solders.

Packaging Parts in quantity ≥ 100 pcs are supplied on tape & reel (E3317LFT)

Solderability MIL-STD-202, Method 208, Category 3

Marking Laser Marked or Label