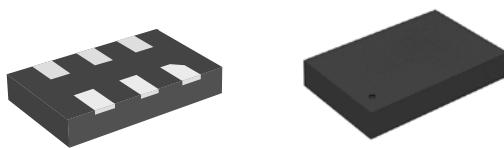


Features

- Frequency Range: 24 to 125MHz
- Output Type: LVDS / LVPECL / HCSL
- Stability: ± 50 ppm
- Supply Voltage: 2.5V, 3.3V
- Power Consumption: 10.9 mA (2.5V LVDS)
- Standby Current: < 1 uA
- Standard Package: 5.0 x 3.2 x 0.85 mm
7.0 x 5.0 x 0.85 mm
- Operating Temperature: 0 to 70 °C



This product is rated "Green", please contact factory for environmental compliancy information

Specification

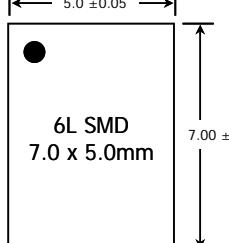
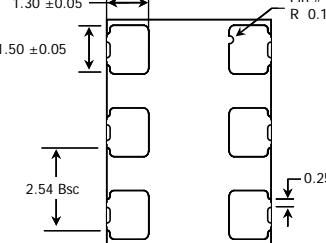
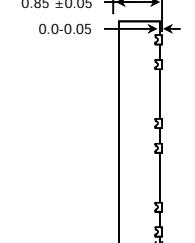
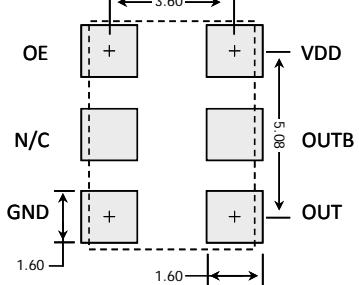
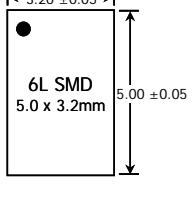
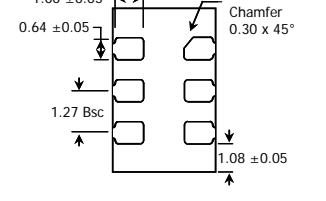
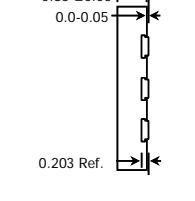
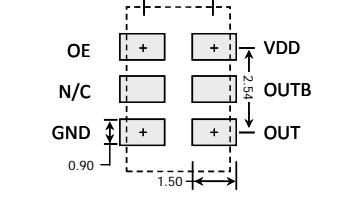
Parameter	Symbol	Specifications			Specifications			Conditions
		LVDS	LVPECL	HCSL	LVDS	LVPECL	HCSL	
Supply Voltage	VDD	2.5 V			3.3 V			Nominal
Frequency Stability	F _{STB}	± 50 ppm			± 50 ppm			Total Frequency Stability*
Supply Current	IDD	10.9 mA	27.6 mA	22 mA	11.3mA	34.1mA	22.7mA	100MHz
Quiescent Current	I _{OE}	1 uA			1 uA			Maximum; OE = GND
Input LOW / HIGH level	V _{IL} / V _{IH}	0.3VDD (max) / 0.7VDD(min)			0.3VDD (max) / 0.7VDD(min)			At OE pin
Rise / Fall Time	T _R / T _F	500/710ps	620/420ps	580/390ps	450/470ps	430/400ps	420/380ps	Maximum; 20/80% of V _A ; Output load (CL) = 2pF
Amplitude	V _A	0.35V	0.71V	0.70V	0.35V	0.79V	0.70V	Single Ended output swing (Pk-Pk)
Mid Level (offset)	V _M	1.2 V	1.1V	0.35V	1.2 V	2 V	0.35V	
Symmetry	SYM	45 / 55%			45 / 55%			Worst case
Start-up time	T _{ST}	400 us			400 us			Output valid time after VDD meets the specified range & OE transition
Period Jitter	P _J _{RMS}	3.6 ps	2.9 ps	2.5 ps	2.9 ps	3 ps	2.6 ps	100MHz
Cycle to Cycle Jitter	CCJ _{Max}	33 ps	22 ps	19 ps	27 ps	29 ps	24 ps	100MHz; measured over 12k cycles
Phase Jitter	ϕ J	1.0 ps			1.0 ps			12k to 20MHz (nominal)
Output Frequency	F _{OUT}	Standard Frequencies: 25 33.333 40 50 62.5 66.66 100 125						

Note: Above specifications are typical at room temperature (25°C) unless otherwise specified.

* Inclusive of initial frequency accuracy, operating temperature range, supply variation, load variation, 3 times solder reflow, shock, vibration and 10 years aging at 25°C.

Package Outline and Dimensions

Typical PCB Land Pattern

 Top View	 Bottom View	 Side View	 Typical PCB Land Pattern
 Top View	 Bottom View	 Side View	 Typical PCB Land Pattern

Absolute Maximum Ratings

Stresses beyond those listed under *Absolute Maximum Ratings* may cause permanent damage to the device. These ratings are stress specifications only. Functional operation of product at these or under any condition beyond those listed in the operating specifications is not implied. Exposure to absolute maximum rated conditions may affect product reliability.

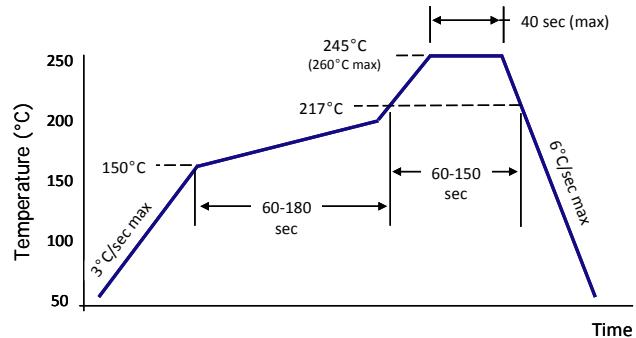
Item	Maximum Absolute Rating
VDD	4.6V
OE	-0.5V to VDD + 0.5V
OUT / OUTB	-0.5V to VDD + 0.5V
Storage Temperature	-65°C to 150°C

Pin Descriptions

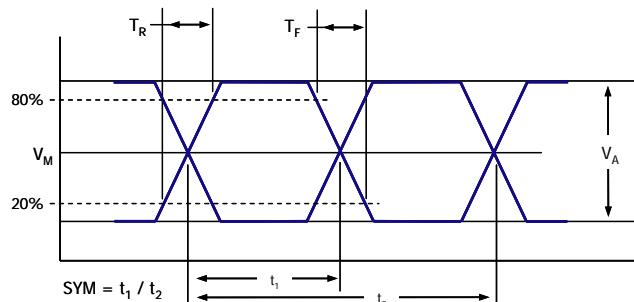
Pin #	Name	Description
1	OE ¹	Output enable (0 = Output Disabled)
2	N/C	Do not connect
3	GND	Ground
4	OUT ²	Positive Output
5	OUTB ²	Negative Output
6	VDD	Power

1. Pulled high internally
2. Weak pull down to GND

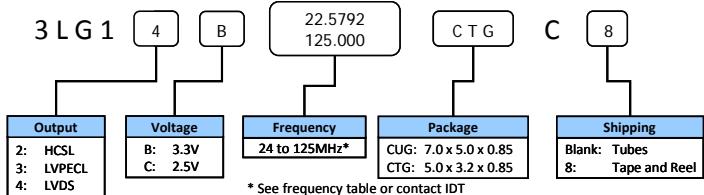
Solder Reflow Profile



Output Waveform



Ordering Information



Package Suffix	Minimum Order Quantity (MOQ)		Factory Order Increment (FOI)	
	T & R	Bulk	T & R	Bulk
CUG	2500	1250 (25 Tubes)	2500	1250 (25 Tubes)
CTG	2500	1190 (17 Tubes)	2500	1190 (17 Tubes)



www.IDT.com

6024 Silver Creek Valley Road
San Jose, California 95138

Sales

800-345-7015 (inside USA)
+1 408-284-8200 (outside USA)
Fax: 408-284-2775

Technical Support

crystalfreetechsupport@idt.com
+1 408-360-5656

DISCLAIMER Integrated Device Technology, Inc. (IDT) and its subsidiaries reserve the right to modify the products and/or specifications described herein at any time and at IDT's sole discretion. All information in this document, including descriptions of product features and performance, is subject to change without notice. Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of IDT's products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of IDT or any third parties.

IDT's products are not intended for use in life support systems or similar devices where the failure or malfunction of an IDT product can be reasonably expected to significantly affect the health or safety of users. Anyone using an IDT product in such a manner does so at their own risk, absent an express, written agreement by IDT.

Integrated Device Technology, IDT and the IDT logo are registered trademarks of IDT. Other trademarks and service marks used herein, including protected names, logos and designs, are the property of IDT or their respective third party owners.

Copyright 2010, 2011. All rights reserved.