



LB1205M

Monolithic Digital IC

High-Voltage, Large-Current Darlington Driver

ON Semiconductor®

<http://onsemi.com>

Overview

The LB1205M is a 4-unit, high withstand voltage (65V), large-current (1.5A) Darlington driver array with input low active configuration and sync output.

Features

- 4-unit, high withstand voltage (65V), large-current (1.5A) Darlington driver.
- PNP input type (low active).
- On-chip spark killer diodes.
- On-chip input protection diodes.
- Capable of being driven directly from 5V operated CMOS, TTL.

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V _{DD} max		7.0	V
	V _{CC} max		62	V
Output supply voltage	V _O max		65	V
Input supply voltage	V _{IN} max	V _{IN} ≥ GND	V _{DD} -7.0 to V _{DD} -10.0	V
Output current	I _O max		1.5	A
Spark killer diode forward current	I _{FS}		1.5	A
Allowable power dissipation	P _d max	Independent IC	0.65	W
		Mounted on the recommended PCB	1.7	W
Operating temperature	T _{opr}		-20 to +75	°C
Storage temperature	T _{stg}		-55 to +150	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

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Allowable Operating Conditions at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage range	V_{DD}		3.5 to 7.0	V
Input "ON" level voltage	V_{INon}	$V_{IN} \geq GND, I_O = 1.0\text{A}$	$V_{DD}-7.0$ to $V_{DD}-2.6$	V
Input "OFF" level voltage	V_{INoff}	$I_O \leq 30\mu\text{A}$	$V_{DD}-0.3$ to $V_{DD}+10.0$	V

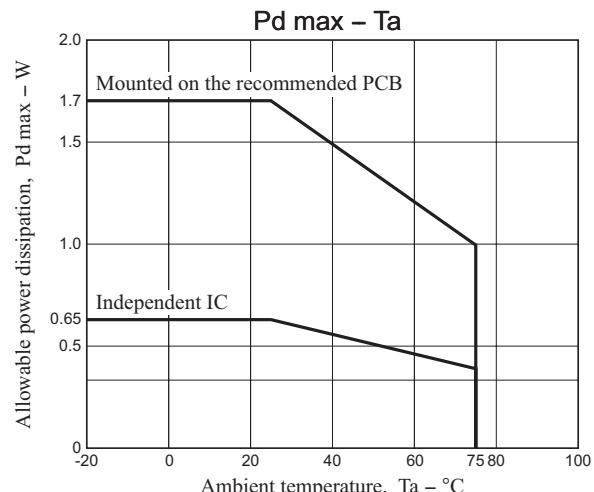
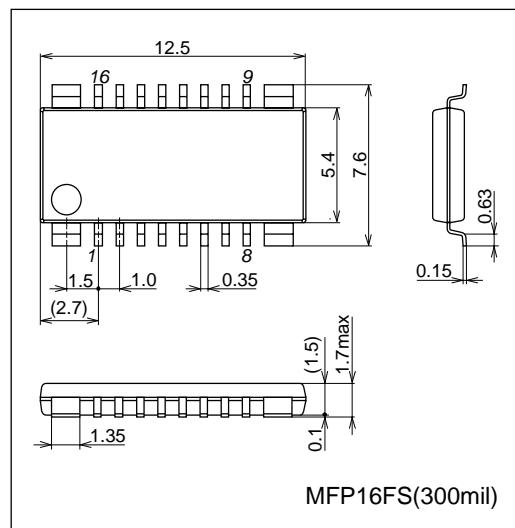
Electrical Characteristics at $T_a = 25^\circ\text{C}, V_{DD} = 5\text{V}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output saturation voltage	V_{Osat1}	$V_{IN} = V_{DD}-5.0\text{V}, I_O = 0.5\text{A}$			1.2	V
	V_{Osat2}	$V_{IN} = V_{DD}-5.0\text{V}, I_O = 1.0\text{A}$			1.5	V
	V_{Osat3}	$V_{IN} = V_{DD}-5.0\text{V}, I_O = 1.5\text{A}$			2.0	V
Output sustain voltage	V_{Osus}	$I_O = 100\text{mA}$	65			V
Input current	I_{IN}	$V_{DD} = 7.0\text{V}, V_{IN} = V_{DD}-7.0\text{V}$			1.0	mA
Spark killer diode forward voltage	V_{FS}	$I_{FS} = 1.5\text{A}$			3.0	V
Spark killer diode reverse current	I_{RS}	$V_{CC} = 62\text{V}, V_O = 0\text{V}$			30	μA

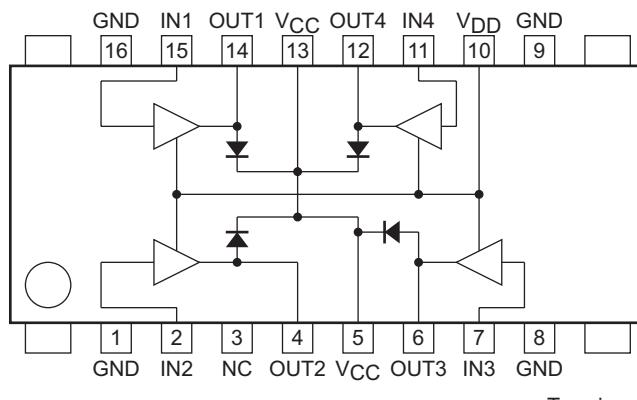
Package Dimensions

unit : mm (typ)

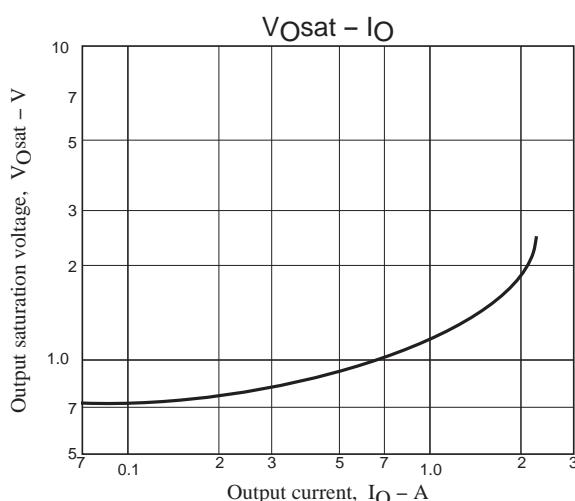
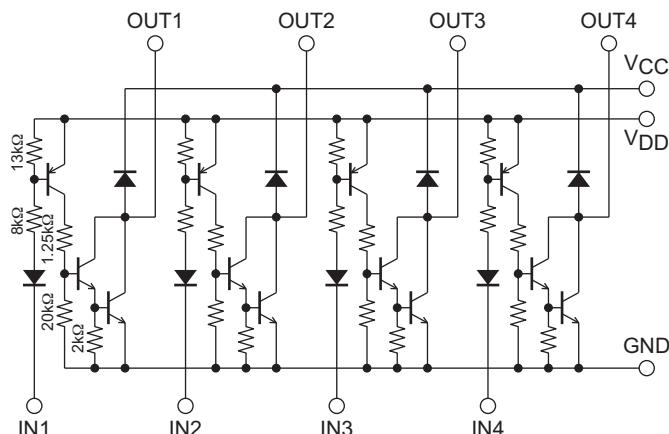
3097B



Pin Assignment



Equivalent Circuit



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"LifeElectronics" LLC

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С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибуторских договоров

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- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
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- Входной контроль качества.
- Наличие сертификата ISO.

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- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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