

Dual 4.0A High Speed Low-Side Gate Driver

Features

- Efficient, low-cost solution for driving MOSFETs and IGBTs
- Wide supply voltage operating range: 4.5V to 18V
- 4.0A source / 4.0A sink output current capability
- Fast propagation delays (35ns typical)
- Fast rise and fall times (20ns typical)
- Logic inputs 3.3V capability
- Multiple input choices: TF0227 (dual non-inverting inputs), TF0227B (dual inverting inputs), TF0227C (one inverting input and one non-inverting input).
- Extended temperature range: -40°C to +125°C

Applications

- Switch mode power supplies
- Motor Drive
- Line Drivers
- DC-DC Converters



SOIC-8(N)

Description

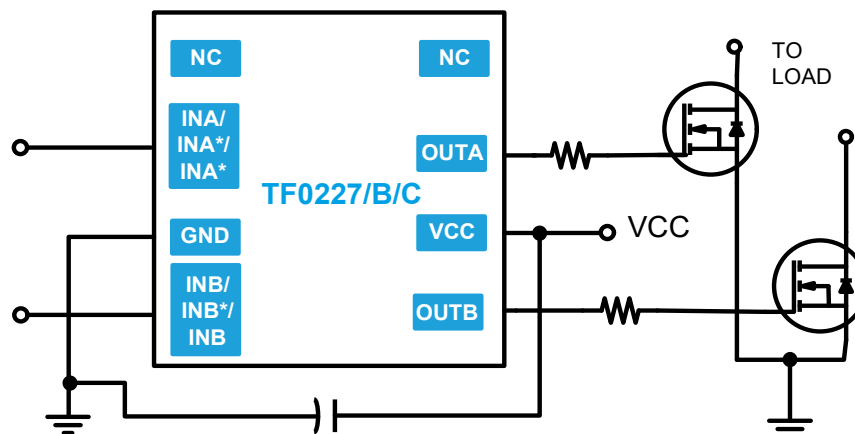
The TF0227/B/C, dual, high speed, low side MOSFET and IGBT drivers are capable of driving 4.0A of peak current. The TF0227/B/C logic inputs are compatible with standard TTL and CMOS levels (down to 3.3V) to interface easily with MCUs. Fast and well matched propagation delays allow high speed operation, enabling a smaller, more compact power switching design using smaller associated components.

The TF0227/B/C is offered in an SOIC-8(N) package and it operates over an extended -40 °C to +125 °C temperature range.

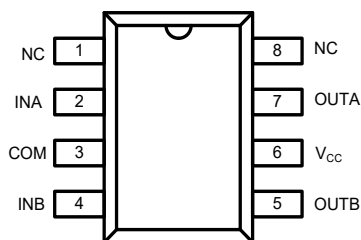
Ordering Information

PART NUMBER	PACKAGE	PACK / Qty	MARK
TF0227-TAU	SOIC-8(N)	Tube / 100	YYWW TF0227
TF0227-TAH	SOIC-8(N)	T&R / 2500	Lot ID
TF0227B-TAU	SOIC-8(N)	Tube / 100	YYWW TF0227B
TF0227B-TAH	SOIC-8(N)	T&R / 2500	Lot ID
TF0227C-TAU	SOIC-8(N)	Tube / 100	YYWW TF0227C
TF0227C-TAH	SOIC-8(N)	T&R / 2500	Lot ID

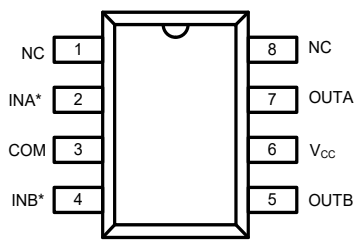
Typical Application



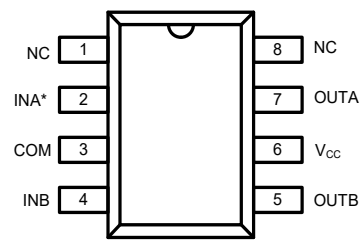
Pin Diagrams



Top View: TF0227



Top View: TF0227B

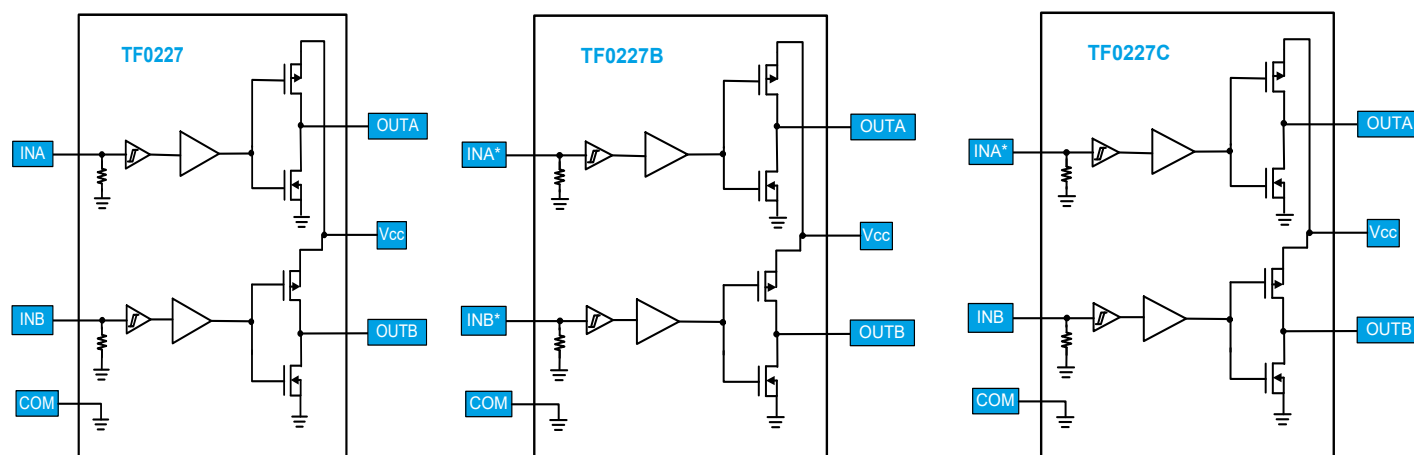


Top View: TF0227C

Pin Descriptions

PIN NAME	PIN NUMBER	PIN DESCRIPTION
NC	1, 8	No Connect
INA	2	For TF0227, logic input for A phase, in phase with OUTA.
INA*	2	For TF0227B and TF0227C, logic input for A phase, out of phase with OUTA.
COM	3	Supply return
INB	4	For TF0227 and TF0227C, logic input for B phase, in phase with OUTB.
INB*	4	For TF0227B, logic input for B phase, out of phase with OUTB
OUTB	5	Gate driver output B phase
V _{CC}	6	Supply input
OUTA	7	Gate driver output A phase

Functional Block Diagram



Revision History

Rev.	Change	Owner	Date
1.0	First release datasheet	D. Walton	12/18/2022

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