

# TF2117/TF2118

### Single Channel Driver

#### **Features**

- Floating channel in bootstrap operation to 600V
- Drives one N-channel MOSFET or IGBT
- Outputs tolerant to negative transients
- Wide logic supply: 10V to 20V
- Schmitt triggered logic input with internal pull down
- Undervoltage lockout for V<sub>cc</sub> and V<sub>BS</sub>
- Extended temperature range: -40°C to +125°C

#### **Description**

The TF2117 and TF2118 are high voltage, high speed gate drivers capable of driving one N-channel MOSFETs and IGBTs in a bootstrap operation. TF Semiconductor's high voltage process enables the TF2117 and TF2118 to switch at 600V. The TF2117 and TF2118 logic input is compatible with standard CMOS outputs (to 3.3V). The driver output features high pulse current buffers designed for minimum driver cross conduction. The single floating channel can be used in high side or low side configuration.

The TF2117 and TF2118 are offered in a space saving 8-pin SOIC and 8-pin PDIP package. They operate over an extended -40  $^{\circ}$ C to +125  $^{\circ}$ C temperature range.

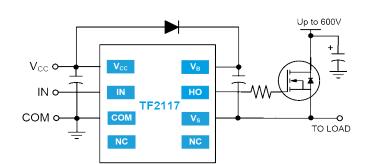


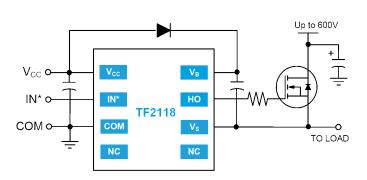
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PDIP-8
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## **Applications**

- DC-DC Converters
- AC-DC Inverters
- Motor Controls
- Class D Power Amplifiers

# **Typical Application**



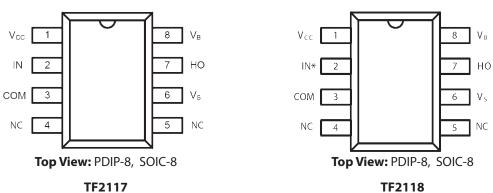


### **Ordering Information**

		Y	ear Year VVeek VVeek	
PART NUMBER	PACKAGE	PACK / Qty	MARK	
TF2117-TAU		Tube / 100	VYWW	
TF2117-TAH	SOIC-8	T&R / 2500	TF2117 Lot ID	
TF2117-3AS	PDIP-8	Tube / 50	TF2117 Lot ID	
TF2118-TAU		Tube / 100	YYWW	
TF2118-TAH	SOIC-8	T&R / 2500	TF2118 Lot ID	
TF2118-3AS	PDIP-8	Tube / 50	TF2118 Lot ID	

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TF2117

## **Pin Descriptions**

PIN NAME	PIN DESCRIPTION
VCC	Logic and gate drive supply
IN	TF2117 Logic input for gate driver output (HO), in phase with HO
IN*	TF2118 Logic input for gate driver output (HO), out of phase with HO
СОМ	Logic ground
NC	No Connect
V <sub>s</sub>	High-side floating supply return
НО	High-side gate drive output
V <sub>B</sub>	High-side floating supply





#### **Single Channel Driver**

Rev.	Change	Owner	Date
1.0	First release datasheet	D. Walton	12/11/2022

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