

# Ignition Gate Drive IC

## FAN1110B-F085

### Description

The FAN1110B-F085 is designed to directly drive an ignition IGBT and control the current and spark event of the coil. The coil current is controlled via the input pin. When the differential input is driven high, the output of the FAN1110B-

# FAN1110B-F085

## ORDERING INFORMATION

Part Number	Operating Temperature Range	Package	Shipping <sup>†</sup>
FAN1110B-F085	-40°C to 150°C	8-SOIC	2500 units / Tape & Reel

<sup>†</sup>For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

## Recommended External Components

### TYPICAL EXTERNAL COMPONENTS

Component	Description	Vendor	Parameter	Typ.	Unit
R <sub>BAT</sub>	Limits transient currents during load dump				



## FAN1110B–F085

### Package Outline

The FAN1110B–F085 is assembled in an 8 lead SOIC Package.

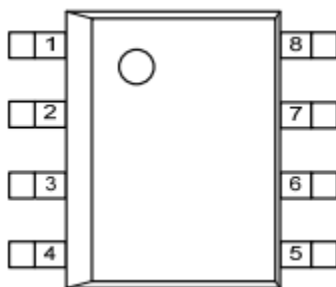


Figure 3. Pin Assignment (Top View)

### PIN DESCRIPTION

Name	Type	Description
Pin1	GND	Ground Reference of the Control IC
Pin2	INL	Input ground signal
Pin3	INH	Positive input signal referenced to INL
Pin4	CSSD	Adjust maximum dwell time (to external capacitor)
Pin5	NC	
Pin6	Output	Gate Drive to the IGBT
Pin7	V <sub>SENSE</sub>	Sense Input used for Ilim function
Pin 8	V <sub>BAT</sub>	Supply voltage

### ABSOLUTE MAXIMUM RATINGS (–40°C to 150°C unless otherwise stated)

Symbol	Parameter	Min.	Max.	Unit
V <sub>BAT</sub>	Voltage at V <sub>BAT</sub> pin (excl. EMC transients)	–0.3	28	V
V <sub>INH</sub>	Voltage at Input pin High	–5	18	V
V <sub>INL</sub>	Voltage at Input pin Low	–5	18	V
V <sub>CSSD</sub>	Voltage at C <sub>SSD</sub>	–0.3	5	V
V <sub>OUTPUT</sub>	Voltage at Gate Output	–0.3	6.5	V
V <sub>SENSE</sub>	Voltage on V <sub>SENSE</sub> pin	0	400	mV

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# FAN1110B-F085

## RECOMMENDED OPERATING CONDITIONS (Reference Load Characteristics) (Note 1)

Symbol	Characteristic	Min.	Typ.	Max.	Units
$I_{Ctyp}$	Collector (Coil) Operating Current		12		A
$L_P$	Coil Primary Inductance		1.5		mH
$R_P$	Coil Primary Resistance (25°C)		0.4		$\Omega$
$R_{LOAD}$	Load Resistance (for delay time measurements)		2		$\Omega$

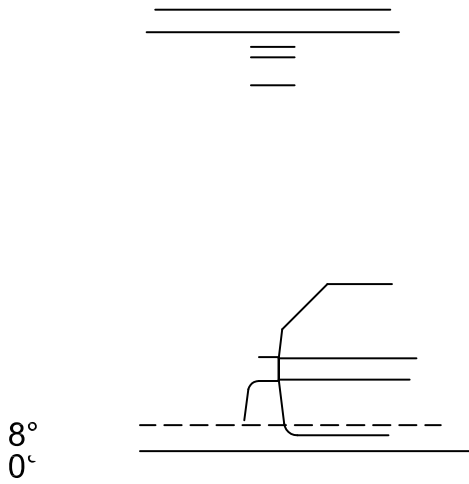
Functional



FAN1110B-F085

PACKAGE DIMENSIONS

SOIC8  
CASE 751EB  
ISSUE A



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