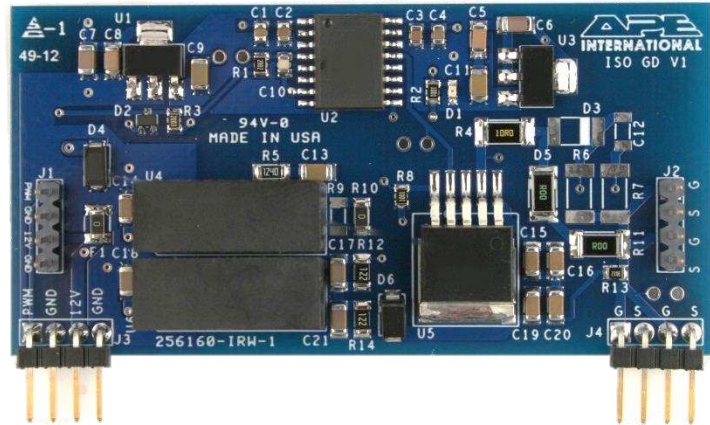


Single Channel Isolated SiC JFET (Off) Gate Driver
FEATURES

- Industrial Temperature: $T_A = 85\text{ }^\circ\text{C}$
- Isolated 4W Power Supply +5/-5
- $\pm 14\text{ A}$ peak, $\pm 4\text{ A}$ continuous
- 500 kHz Switching Frequency
- 5000V Galvanic Signal Isolation
- Vertical Mounting for reduced Footprint

500 kHz, $\pm 14\text{ A}$

Absolute Maximum Ratings

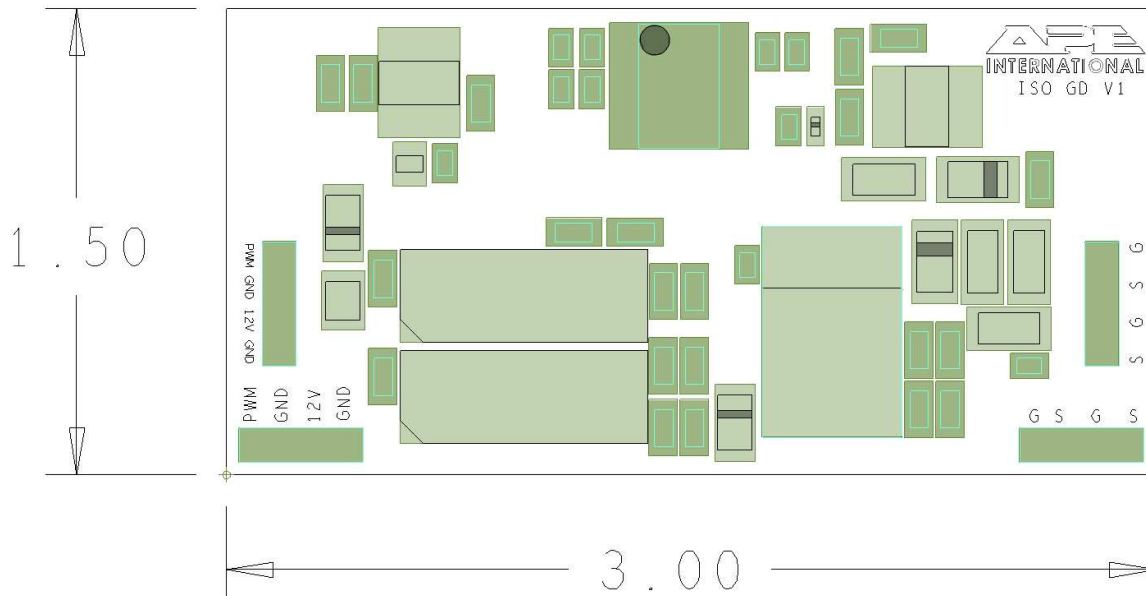
Symbol	Parameter	Condition	Value	Units
V_{DD}	Primary Power supply		-0.5 to 14	V
V_I	Logic Level Inputs		-0.5 to 6	V
I_o	Continuous output current	$T_A = 25\text{ }^\circ\text{C}$	± 4	A
I_o	Peak pulsed drain current	$T_A = 25\text{ }^\circ\text{C}$	± 14	A
T_j	Operating junction temperatures		-50 to 115	$^\circ\text{C}$
T_{stg}	Storage temperature		-50 to 85	$^\circ\text{C}$

Electrical Characteristics						
Symbols	Parameter	Condition(s)	Values			Units
			Min.	Typical	Max.	
VDD _P	Primary Power Supply		10	12	14	V
V _{IH}	Logic Level input voltages	High-level input voltage	2	-	-	V
V _{IL}		Low-level input voltage	-	-	0.8	
V _{OH}	Output voltage level	High-level output voltage	V _{DD} -0.025V	+5	-	V
V _{OL}		Low-level output voltage	-	-5	V _{SS} +0.025V	V
V _{IORM}	Working Voltage Isolation			891		V
C _{ISO}	Isolation Capacitance			50		pF
CMTI	Common Mode Transient Immunity		20	45		kV/us
R _G	Output Resistance ⁽¹⁾	High		0.4	0.8	Ω
R _G		Low		0.3	0.6	
t _{on}	Output Rise Time	CLOAD=15nF, VCC=18V T _A =25°C		25		ns
t _{off}	Output Fall Time	CLOAD=15nF, VCC=18V T _A =25°C		18		
F _{sw}	Switching Frequency	Dependent on load, thermal limitation		500		kHz
t _{PHL} , t _{PLH}	Propagation delay	High-to-low/Low-to-High		60		ns

(1) Output resistance of totem pole output IC. Additional Gate resistance is added with SMD resistors.

PACKAGE DIMENSIONS

All dimensions shown are in inches

**COMPANION PARTS**

Silicon Carbide Schottky Diode, APE-HT-xxxx
Silicon Carbide Discretes, APE-HT-0100 series

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