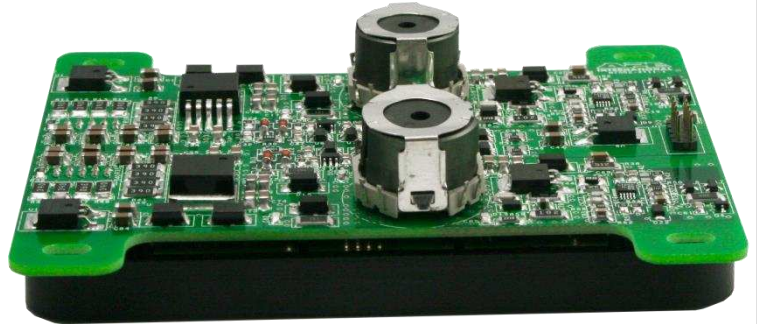


Two Channel Isolated SiC MOSFET Gate Driver
FEATURES

- Specifically designed for APE HT-3000 series modules
- Military Temperature: $T_A = 125\text{ }^\circ\text{C}$, $T_j = 150\text{ }^\circ\text{C}$
- On Board 6W Isolated Power Supplies
- Programmable UVLO with hysteresis
- $\pm 30\text{ A}$ peak
- 25pF Isolation capacitance per channel
- 4000V Galvanic Signal Isolation
- Capable of Short Excursions to 150°C ambient

+20/-5 V, $\pm 30\text{A}$

Absolute Maximum Ratings

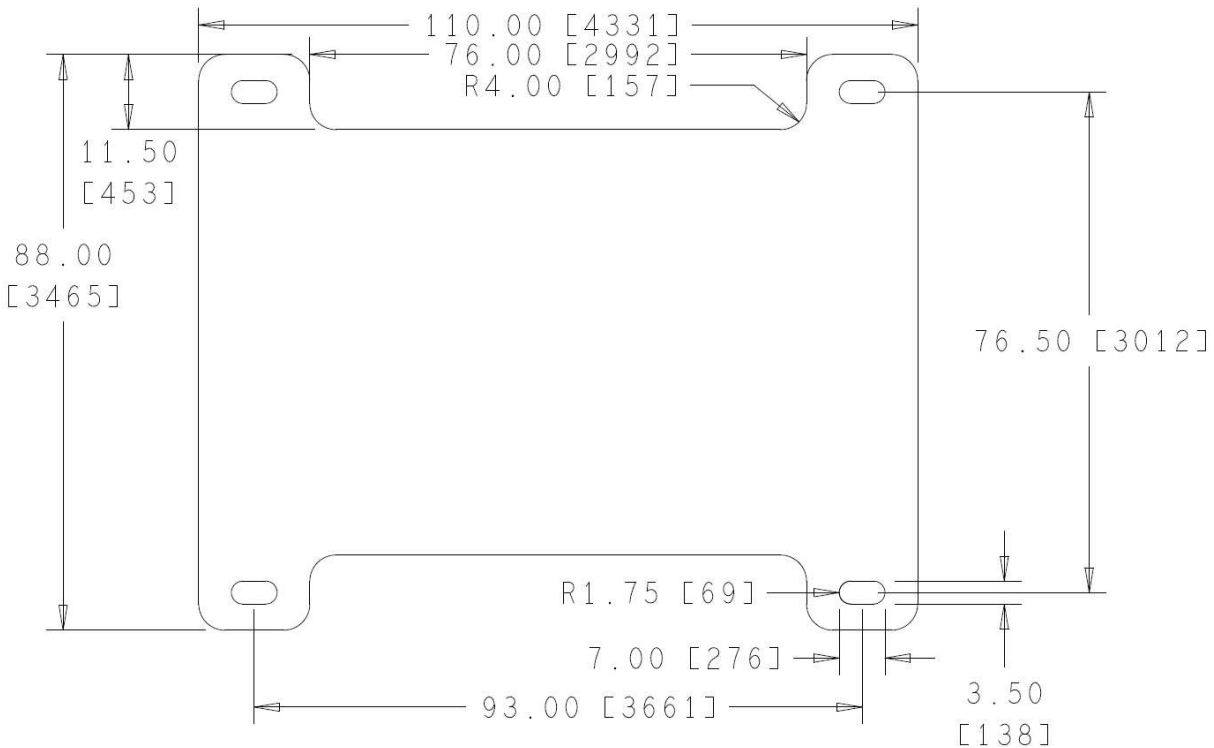
Symbol	Parameter	Condition	Value	Units
V_{DC}	Supply Voltage		-0.5 to 35	V
V_I	Logic Level Inputs		-0.5 to 6	V
I_o	Continuous output current	$T_A = 25\text{ }^\circ\text{C}$	$\pm\text{TBD}$	A
I_o	Peak pulsed drain current	$T_A = 25\text{ }^\circ\text{C}$	± 30	A
T_j	Operating junction temperatures		-50 to 150	$^\circ\text{C}$
T_{stg}	Storage temperature		-50 to 150	$^\circ\text{C}$
V_{isol}	Insulation test voltage	AC, 1 min.	TBD	V
		AC, 1 s.	TBD	V



Electrical Characteristics						
Symbols	Parameter	Condition(s)	Values			Units
			Min.	Typ.	Max.	
VDC	Supply Voltage			28		V
V _{UVLO}	UVLO	Inactive		15		V
		Active		12		
		Hysteresis		3		
V _{IH}	Logic Level input voltages	High-level input voltage	3.15	-	6	V
V _{IL}		Low-level input voltage	0	-	1.35	
V _{OH}	Output voltage level	High-level output voltage	V _{DD} -0.025V	-	-	V
V _{OL}		Low-level output voltage	-	-	V _{SS} +0.025V	V
V _{IORM}	Working Voltage Isolation			600		V
C _{ISO}	Isolation Capacitance ⁽¹⁾			25		pF
CMTI	Common Mode Transient Immunity		25	40		kV/us
R _G	Output Resistance ⁽²⁾	High		0.17	0.4	Ω
R _G		Low		0.16	0.3	
t _{on}	Output Rise Time	CLOAD=5nF, VCC=25V T _A =25°C		15		ns
t _{off}	Output Fall Time	CLOAD=5nF, VCC=25V T _A =25°C		15		
t _{PHL} , t _{PLH}	Propagation delay	High-to-low/Low-to-High		140		ns
Isolated Power Supply Characteristics						
V _{out+}	Positive Voltage Output			+20		V
V _{out-}	Negative Voltage Output			-5		V
η	Power Supply Efficiency	4/5 load on positive output 1/5 load on negative output		77		%
P _{out}	Output Power	4/5 load on positive output 1/5 load on negative output		6W		

PACKAGE DIMENSIONS

All dimensions shown are in inches


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