TECHNICAL DATA

PART NUMBER: SCP-5115, REV. -

Hermetic Half Bridge -- IGBT Module 600V, 800A

Features:

- Hermetic Core Construction
- Increased Creepage and Clearance Distances for High Altitude operation
- Built-in RTD for accurate Temperature sense
- High Frequency Switching
- Operation at Temperature Extremes
- Internal Layout with Minimized Stray Inductances



Maximum Ratings All ratings are at $T_A = 25^{\circ}$ C unless otherwise specified.

maximam ratings are		TA = 20 0 arricos ourior wide opcomos.			
Symbol	Test Conditions	Value	Units		
V _{ces}	Vge = 0V	600	V		
I _c	Tc = 25C / 70C	800 / 500	Α		
I _{cpulse}	Tj = 25C / 125C, 10kHz, D=.05	1400 / 800	Α		
V_{GE}		+ / - 20	V		
Hipot	1500Vrms, 50Hz / 60Hz, 1 min.				
Tj		-55 to 150	°C		
Diode					
I _F	Tc = 25C / 70C	800 / 500	A		
I _{FM}	Tj = 25C / 125C, 10kHz, D=.05	1400 / 800	А		

Electrical Characteristics All ratings are at $T_A = 25^{\circ}$ C unless otherwise specified.

Electrical Characteristics All ratings		are at $I_A = 25^{\circ}$ C unless otherwise specified.			
Symbol	Test Conditions	Min.	Тур.	Max.	Units
$V_{CE(sat)}$	Vge = 15V, pulsed				
	ton = 100us, f = 10Hz				
	Ic = 450A Tc = 25C	-	1.9	2.3	V
V _{GE(th)}	Ic = 4mA, Vge = Vce	4.5	-	6.0	V
I _{CES}	Vce = 600V, Vge = 0V	-	-	3.0	mA
I _{GES}	Vce = 0V, Vge = 20V	-	-	600	nA
	Vce = 0V, Vge = 20V, Tc=125C			20	mA
Ets	Total Switching Energy				
	Vge = 15V	-	30	-	mJ
	Vcc = 300V, Ic = 450A,				
C _{iss}	Vce = 25V	-	42	-	nF
C _{oss}	Vge = 0V	-	8.2	-	nF
C_{rss}	f = 1MHz	-	7	-	nF
t _{d(on)}	Vce = 300V	-	120	180	ns
t _r	Ic = 450A	-	100	220	ns
t _{d(off)}	Vge = + / - 15V	-	375	750	ns
t _f	Rg = 1.0 Ohm	-	150	320	ns
Diode					
V _F	I _F = 450A	-	1.4	1.7	V
t _{RR}	$I_F = 450A$; $V_R = 300V$,	-	-	150	ns
	di/dt=1000A/usec				

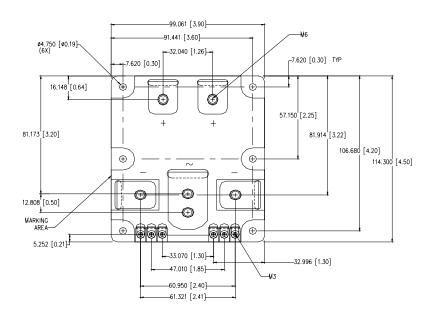
^{• 221} West Industry Court Deer Park, NY 11729-4681 Phone (631) 586 7600 Fax (631) 242 9798 •

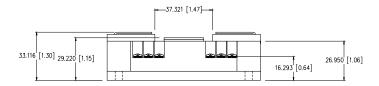
[•] World Wide Web - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •

TECHNICAL DATA

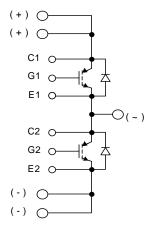
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MECHANICAL DIMENSIONS: in inches / mm





SCHEMATIC





TECHNICAL DATA

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