

Part Number: SCP-5887, Rev. –

**HV BRIDGE RECTIFIER STACK: 1A 9300V MODULE**

**Features**

- Ideal for HV Power Supply Application
- Excellent Thermal Performance Design
- Isolated base plate: 15KV dc
- Low Mechanical Stress Design
- Contact Factory for Screening options

**MAXIMUM RATINGS**

(T<sub>J</sub>=25°C UNLESS OTHERWISE SPECIFIED)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Peak Inverse Voltage and DC Blocking Voltage Per Diode BR1	BV <sub>CES</sub>	3300	-	-	V
BR2 – BR6		1200	-	-	V
Average Rectified Forward Current Per Diode T <sub>C</sub> = 25 °C	I <sub>O</sub>	-	-	1	A
T <sub>C</sub> = 100 °C		-	-	0.2	A
Peak Surge Current Per Diode	I <sub>FSM</sub>	-	-	25	A
Operating Temperature Range	T <sub>OP</sub>	- 65	-	175	°C

**ELECTRICAL CHARACTERISTICS**

(T<sub>J</sub>=25°C UNLESS OTHERWISE SPECIFIED)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage I <sub>F</sub> = 1A, t <sub>p</sub> = 300 μs Pulse BR1	V <sub>F1</sub>	-	-	7.5	V
BR2 – BR6		-	-	2.5	V
Reverse Leakage Current T <sub>C</sub> = 25 °C	I <sub>R1</sub>	-	-	1.0	μA
BR1: V <sub>R</sub> = 2500V		-	-	1.0	μA
BR2 – BR6: V <sub>R</sub> = 1000V					
Reverse Leakage Current T <sub>C</sub> = 100 °C	I <sub>R2</sub>	-	-	50	μA
BR1: V <sub>R</sub> = 2500V		-	-	50	μA
BR2 – BR6: V <sub>R</sub> = 1000V					
Breakdown Voltage I <sub>R</sub> = 100 μA	B <sub>VR</sub>	3300	-	-	V
BR1		1200	-	-	V
BR2 – BR6					
Reverse Recovery Time I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A , I <sub>RR</sub> = 0.25A	t <sub>RR</sub>	-	-	60	ns
Capacitance per Diode V <sub>R</sub> = 6V	C <sub>T</sub>	-	-	20	pF
BR1		-	-	60	pF
BR2 – BR6					

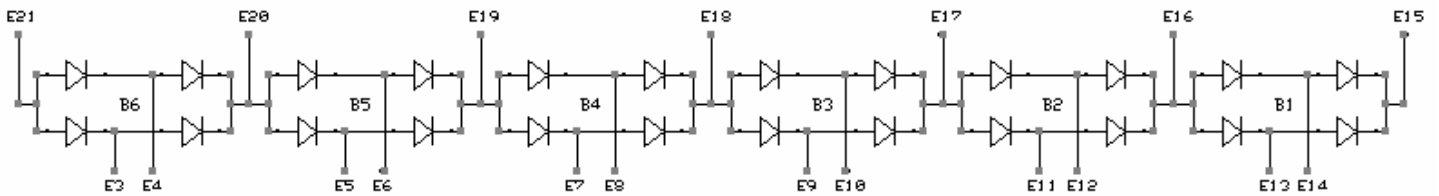
- 221 West Industry Court ■ Deer Park, NY 11729 ■ (631) 586 7600 FAX (631) 242 9798 •
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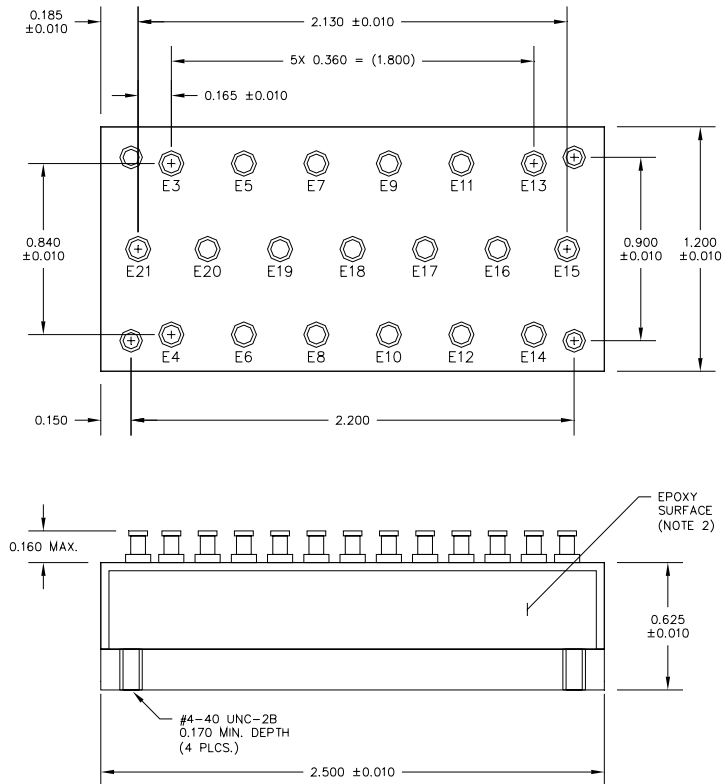
**PACKAGE CHARACTERISTICS**

Thermal Resistance (Junction to Base)	$R_{\theta JB}$	-	-	2.5	$^{\circ}C/W$
Insulation Resistance: All Terminals to Base @ 15000V	$R_{INSUL}$	10	-	-	$G\Omega$
Storage Temperature Range	$T_{STG}$	- 65	-	175	$^{\circ}C$
Isolation to Base Plate	$V_{iso}$	-	-	15000	V

**Schematic Diagram:**



**Mechanical Outline:**



**NOTES:**  
 1) DIMENSIONS UNLESS OTHERWISE NOTED ARE IN INCHES.  
 2) POTTING SURFACE UNCONTROLLED.

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