



180 Lafayette Road
 North Hampton, NH 03862-2448
 PH: 603-964-3165
 FX: 603-964-3168
 WWW.PDEELECTRONICS.COM

Full Wave Bridge Assembly

High Current, 3 Phase
 SC3BH Series

FEATURES

- Low Thermal Impedance
- High Surge Rating
- High Current Rating
- Glass Passivated Diodes
- Isolated for Direct Heatsink Mounting
- Small Case Size

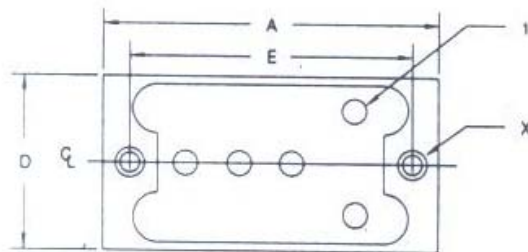
QUICK REFERENCE DATA

- $V_R = 50V-600V$
- $T_{rr} = 30nS-2\mu S$
- $I_{FSM} \geq 150A$

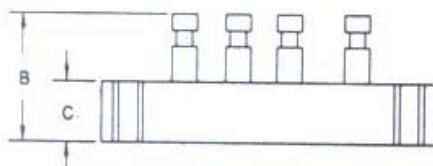
ABSOLUTE MAXIMUM RATINGS

Device	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)} @ T_{MB}$						1 Cycle Surge	
		Volts	Amps ($I_F @ T_{CASE}$)			Amps ($I_F @ T_{AMB}$)			I_{FSM} $T_p = 8.3mS$
			@55°C	@100°C	@125°C	@25°C	@55°C	@100°C	Amps $T_c @ 25°C$
SC3BH05	50	10.0	7.0	5.0	4.0	3.0	1.7	150	
SC3BH1	100	10.0	7.0	5.0	4.0	3.0	1.7	150	
SC3BH2	200	10.0	7.0	5.0	4.0	3.0	1.7	150	
SC3BH4	400	10.0	7.0	5.0	4.0	3.0	1.7	150	
SC3BH6	600	10.0	7.0	5.0	4.0	3.0	1.7	150	
SC3BH05F	50	9.0	6.3	4.5	3.0	2.2	1.2	150	
SC3BH1F	100	9.0	6.3	4.5	3.0	2.2	1.2	150	
SC3BH2F	200	9.0	6.3	4.5	3.0	2.2	1.2	150	
SC3BH4F	400	9.0	6.3	4.5	3.0	2.2	1.2	150	
SC3BH6F	600	9.0	6.3	4.5	3.0	2.2	1.2	150	
SC3BH05FF	50	12.0	9.0	7.5	4.0	3.0	1.7	175	
SC3BH10FF	100	12.0	9.0	7.5	4.0	3.0	1.7	175	
SC3BH15FF	150	12.0	9.0	7.5	4.0	3.0	1.7	175	

MECHANICAL



DIM	INCHES		NOTE
	MIN	MAX	
A	1.22	1.28	-
B	-	.50	-
C	.22	.28	-
D	.72	.78	-
E	1.05	1.07	-
X	4-40 UNC-2B THRU (2 PLCS)		-



NOTES:
 1. POSITIVE TERMINAL



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ELECTRICAL CHARACTERISTICS

Device	Maximum Leakage Current Per Leg $I_R @ V_{RWM}$		Maximum Forward Voltage Per Leg $V_F @ I_F$		Maximum Reverse Recovery T_{RR}^*
	$T_C=25^\circ C$	$T_C=100^\circ C$	$T_C=25^\circ C$		$T_A=25^\circ C$
	μA	μA	Volts	Amps	nS
SC3BH05	3	60	1.0	3.0	2000
SC3BH1	3	60	1.0	3.0	2000
SC3BH2	3	60	1.0	3.0	2000
SC3BH4	3	60	1.0	3.0	2000
SC3BH6	3	60	1.0	3.0	2000
SC3BH05F	3	60	1.1	3.0	150
SC3BH1F	3	60	1.1	3.0	150
SC3BH2F	3	60	1.1	3.0	150
SC3BH4F	3	60	1.1	3.0	150
SC3BH6F	3	60	1.1	3.0	150
SC3BH05FF	30	1500	0.97	5.0	30
SC3BH10FF	30	1500	0.97	5.0	30
SC3BH15FF	30	1500	0.97	5.0	30

* Measured on discretes prior to assembly in reverse recovery circuit switching from 0.5A forward to 1.0A reverse current recovering to 0.25A reverse current.

THERMAL CHARACTERISTICS

Operating and Storage Temperature.....	-55°C to +150°C
Maximum Thermal Impedance (typical).....	4.5°C/W Junction to Case