



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

## Full Wave Bridge Assembly

Standard and Fast Recovery, 3 Phase  
 S3BR Series

### FEATURES

- Low Forward Voltage Drop
- Low Reverse Leakage Current
- Very Fast Recovery Time
- Small Case Size

### QUICK REFERENCE DATA

- $V_R = 50V-3000V$
- $T_{rr} = 30nS-2.5\mu S$
- $I_F = 0.5A-2.0A$

### ABSOLUTE MAXIMUM RATINGS

Device	Working Reverse Voltage $V_{RWM}$	Average Rectified Current		1 Cycle Surge Current $t_p=8.3\text{ ms}$ $I_{FSM}$
	Volt	Amps ( $I_F@T_{AMB}$ )		Amps
		@55°C	@100°C	@25°C
S3BR05	50	2.0	1.2	30
S3BR1	100	2.0	1.2	30
S3BR2	200	2.0	1.2	30
S3BR4	400	2.0	1.2	30
S3BR6	600	2.0	1.2	30
S3BR8	800	2.0	1.2	30
S3BR10	1000	2.0	1.2	30
S3BR15	1500	0.5	0.3	14
S3BR20	2000	0.5	0.3	14
S3BR25	2500	0.5	0.3	14
S3BR30	3000	0.5	0.3	14
S3BR05F	50	2.0	1.2	25
S3BR1F	100	2.0	1.2	25
S3BR2F	200	2.0	1.2	25
S3BR4F	400	2.0	1.2	25
S3BR6F	600	2.0	1.2	25
S3BR8F	800	2.0	1.2	25
S3BR25F	2500	0.5	0.3	10
S3BR05FF	50	2.0	1.1	35
S3BR10FF	100	2.0	1.1	35
S3BR15FF	150	2.0	1.1	35

### THERMAL CHARACTERISTICS

Operating Temperature.....	-55°C to +150°C
Storage Temperature.....	-55°C to +150°C



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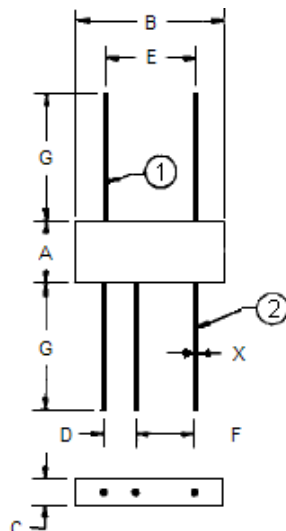
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### ELECTRICAL CHARACTERISTICS

	Maximum Leakage Current $I_R @ V_{RWM}$		Maximum Forward Voltage $V_F @ I_F$		Maximum Reverse Recovery $T_{RR}^*$ nS
	$T_A=25^\circ C$	$T_A=100^\circ C$	$T_A=25^\circ C$		
	$\mu A$	$\mu A$	Volts	Amps	
S3BR05	3	75	1.1	1.0	2000
S3BR1	3	75	1.1	1.0	2000
S3BR2	3	75	1.1	1.0	2000
S3BR4	3	75	1.1	1.0	2000
S3BR6	3	75	1.1	1.0	2000
S3BR8	3	75	1.1	1.0	2000
S3BR10	3	75	1.1	1.0	2000
S3BR15	3	60	5.0	0.25	2500
S3BR20	3	60	5.0	0.25	2500
S3BR25	3	60	5.0	0.25	2500
S3BR30	3	60	5.0	0.25	2500
S3BR05F	3	75	1.2	1.0	150
S3BR1F	3	75	1.2	1.0	150
S3BR2F	3	75	1.2	1.0	150
S3BR4F	3	75	1.2	1.0	150
S3BR6F	3	75	1.2	1.0	250
S3BR8F	3	75	1.2	1.0	300
S3BR25F	3	75	5.0	0.10	300
S3BR05FF	3	150	1.2	1.5	30
S3BR10FF	3	150	1.2	1.5	30
S3BR15FF	3	150	1.2	1.5	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.



DIM	DIMENSIONS INCHES		NOTE
	MIN	MAX	
A	0.40	0.45	—
B	0.97	1.03	—
C	0.15	0.21	—
D	0.22	0.28	—
E	0.59	0.65	—
F	0.33	0.41	—
G	0.75	—	—
X	0.26	0.33	3

**NOTES:**

- ① POSITIVE LEAD
- ② AC LEAD, 3 PLACES
- 3 LEADS ARE PLATED COPPER