



STANDARD RECOVERY, PCB MOUNTING 3-PHASE FULL WAVE BRIDGE RECTIFIER ASSEMBLIES

QUICK REFERENCE DATA

- Low forward voltage drop
- Low reverse leakage current
- Subminiature design
- V_{RWM} up to 3000V

- $V_R = 50V - 3000V$
- $I_F = 0.5 - 2.0A$
- $I_R = 3.0\mu A$
- $t_{rr} = 2.0 - 2.5\mu S$

ABSOLUTE MAXIMUM RATINGS & CHARACTERISTICS

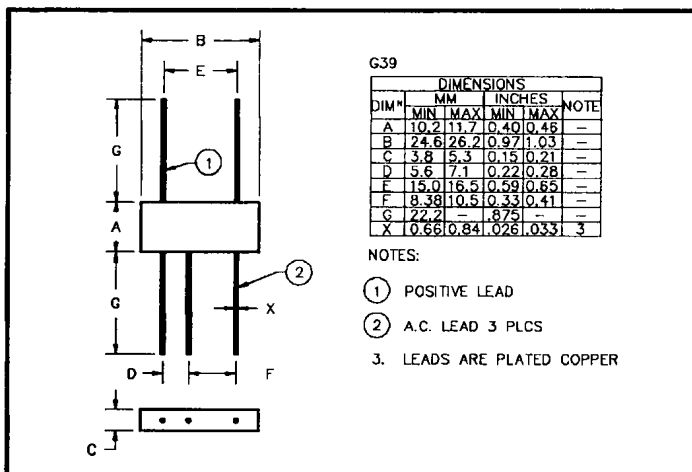
| Device Type | Working Reverse Voltage V_{RWM} | Average Rectified Current $I_{F(AV)}$ | |
|-------------|-----------------------------------|---------------------------------------|---------|
| | | @ 55°C | @ 100°C |
| | Volts | Amps | Amps |
| S3BR05 | 50 | 2.0 | 1.2 |
| S3BR1 | 100 | 2.0 | 1.2 |
| S3BR2 | 200 | 2.0 | 1.2 |
| S3BR4 | 400 | 2.0 | 1.2 |
| S3BR6 | 600 | 2.0 | 1.2 |
| S3BR8 | 800 | 2.0 | 1.2 |
| S3BR10 | 1000 | 2.0 | 1.2 |
| S3BR15 | 1500 | 0.5 | 0.3 |
| S3BR20 | 2000 | 0.5 | 0.3 |
| S3BR25 | 2500 | 0.5 | 0.3 |
| S3BR30 | 3000 | 0.5 | 0.3 |

| Reverse Leakage Current $I_R @ V_{RWM}$ | | Forward Voltage drop / leg $V_F @ 1A$ * @ 250mA | Reverse Recovery Time t_{rr} @ 25°C |
|---|---------|--|--|
| @ 25°C | @ 100°C | | |
| μA | μA | Volts | μS |
| 3.0 | 75 | 1.1 | ↑ 2.0 ↓ |
| 3.0 | 75 | 1.1 | |
| 3.0 | 75 | 1.1 | |
| 3.0 | 75 | 1.1 | |
| 3.0 | 75 | 1.1 | |
| 3.0 | 75 | 1.1 | |
| 3.0 | 60 | * 5.0 | ↑ 2.5 ↓ |
| 3.0 | 60 | * 5.0 | |
| 3.0 | 60 | * 5.0 | |
| 3.0 | 60 | * 5.0 | |

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MECHANICAL

¹ Measured on discrete devices prior to assembly



S3BR10 and S3BR30 are available in Europe to DEF STAN 59-61/90/208 release to F and FX levels.

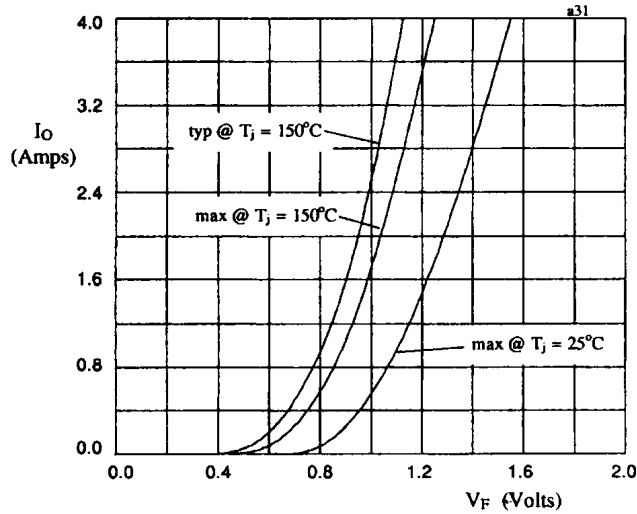


Fig 1. Forward voltage drop against output current per leg for S3BR05 thru S3BR10.

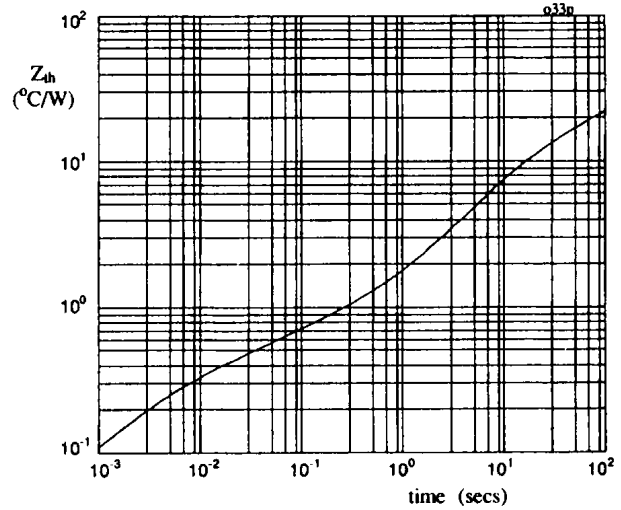


Fig 2. Transient thermal impedance characteristic per leg for S3BR05 thru S3BR10

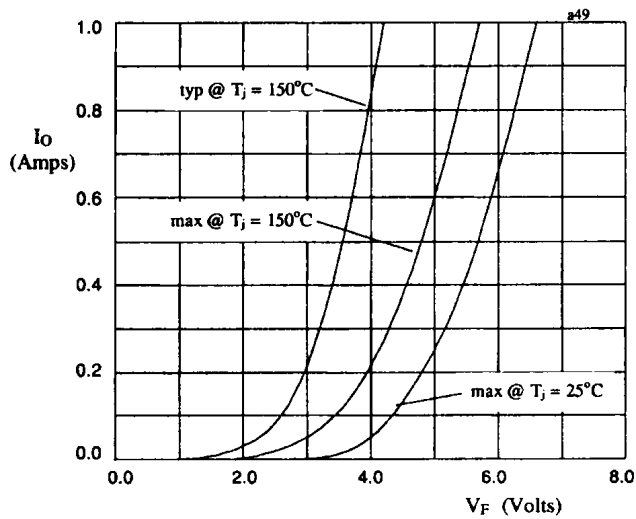


Fig 3. Forward voltage drop against output current per leg for S3BR15 thru S3BR30

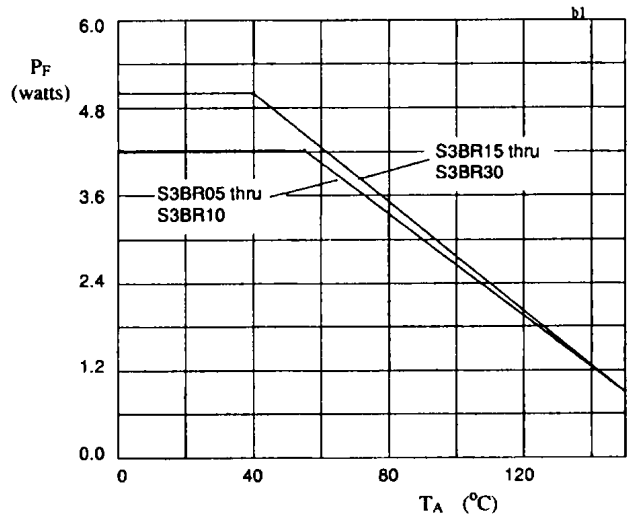


Fig 4. Power derating characteristics when p.c.b mounted