

January 16, 1998

TEL:805-498-2111 FAX:805-498-3804 WEB:http://www.semtech.com

### SUPERFAST RECOVERY, PCB MOUNTING, 1-PHASE FULL WAVE BRIDGE RECTIFIER ASSEMBLIES

### QUICK REFERENCE DATA

- Low forward voltage drop
- Low reverse leakage current
- Subminiature design for pcb applications
- $V_{RWM}$  up to 3000V
- Pcb mounting

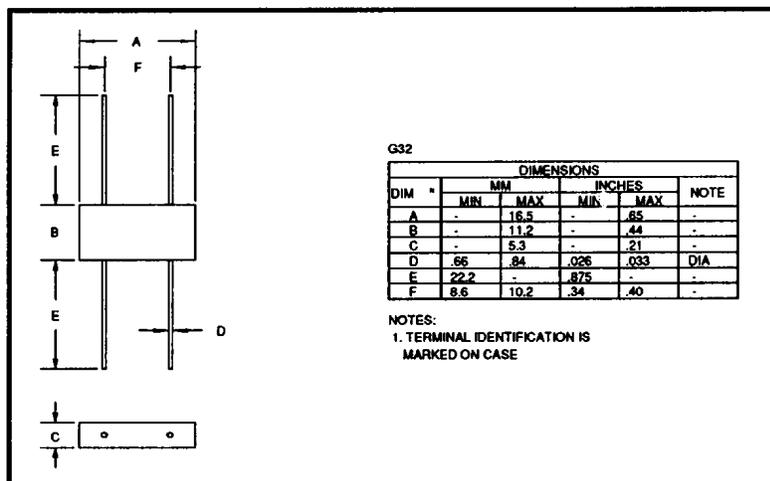
- $V_R = 50V - 150V$
- $I_F = 1.0A$
- $I_R = 2.0 \mu A$
- $t_{rr} = 30nS$

### ABSOLUTE MAXIMUM RATINGS & CHARACTERISTICS

Device Type	Working Reverse Voltage $V_{RWM}$	Average Rectified Current $I_F(AV)$		Repetitive Surge Current $I_{FRM}$	Reverse Leakage Current $I_R @ V_{RWM}$		Forward Voltage drop / leg $V_F @ 1.5A$	Reverse Recovery Time $t_{rr}$
		@ 55 °C	@ 100 °C	@ 25°C	@ 25°C	@ 100°C	@ 25°C	@ 25°C
		Volts	amps	amps	amps	$\mu A$	$\mu A$	Volts
SBR05FF	50	1.0	0.3	14	2.0	100	1.2	30
SBR10FF	100	1.0	0.3	14	2.0	100	1.2	30
SBR15FF	150	1.0	0.3	14	2.0	100	1.2	30

<sup>1</sup> Measured on discrete devices prior to assembly

### MECHANICAL



January 16, 1998

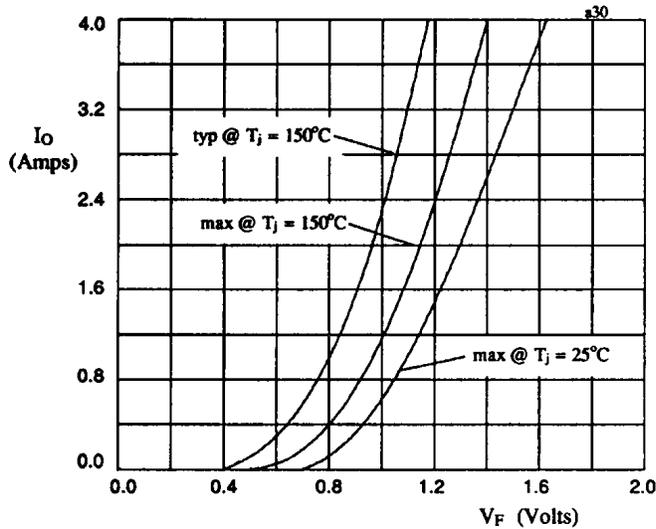


Fig 1. Forward voltage drop against output current per leg

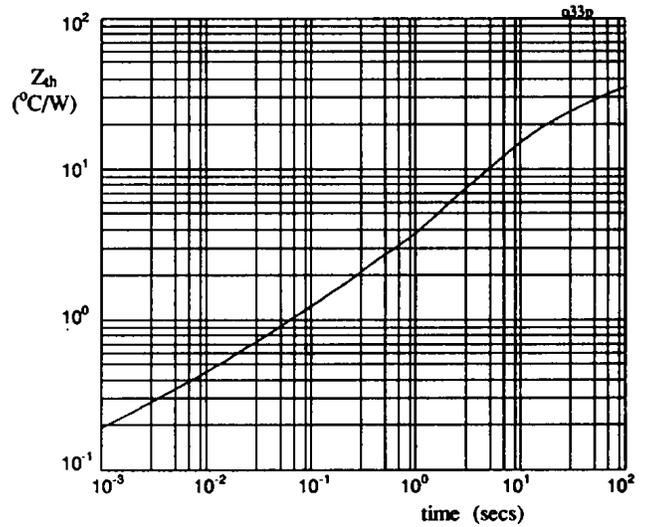


Fig 2. Transient thermal impedance characteristic per leg

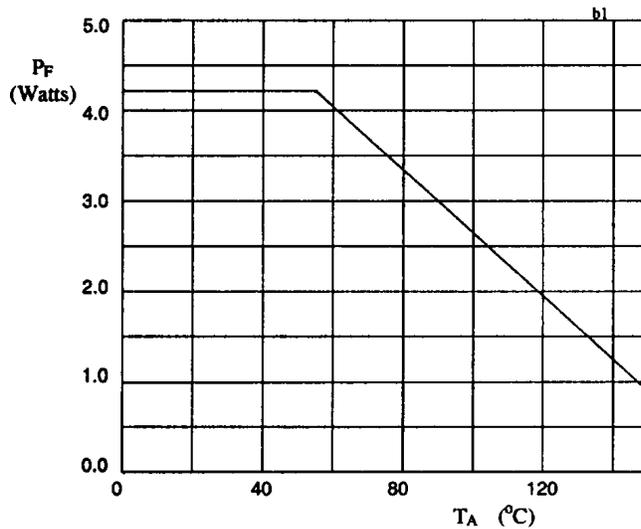


Fig 3. Power derating characteristics when p.c.b mounted