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

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

QUICK REFERENCE DATA

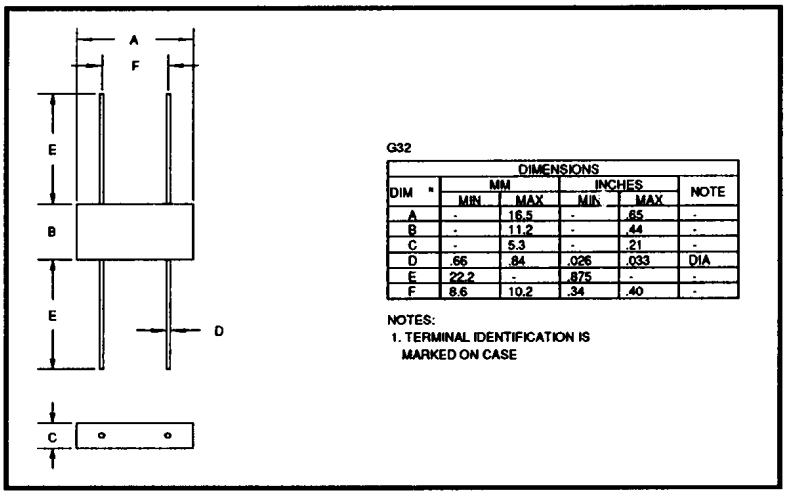
- V_R = 50V - 150V
- I_F = 1.0A
- I_R = 2.0 µA
- t_{rr} = 30nS

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 @ 25°C	Reverse Recovery Time[1] t_{rr}
		@ 55 °C	@ 100 °C	@ 25°C	@ 25°C	@ 100°C		@ 25°C
	Volts	amps	amps	amps	µA	µA	Volts	nS
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

[1] Measured on discrete devices prior to assembly

MECHANICAL



G32

DIM	DIMENSIONS MM MIN	MM MAX	INCHES MIN	INCHES MAX	NOTE
A	-	16.5	-	.65	-
B	-	11.2	-	.44	-
C	-	5.3	-	.21	-
D	.66	.84	.026	.033	DIA
E	22.2	-	.875	-	-
F	8.6	10.2	.34	.40	-

NOTES:
1. TERMINAL IDENTIFICATION IS MARKED ON CASE

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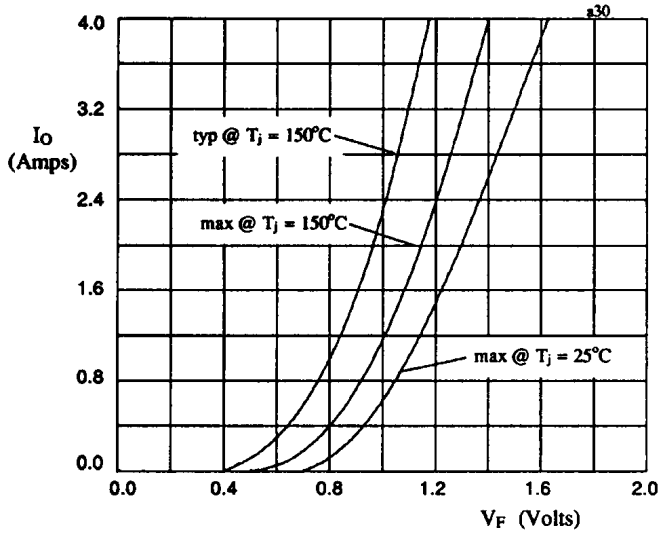

Fig 1. Forward voltage drop against output current per leg

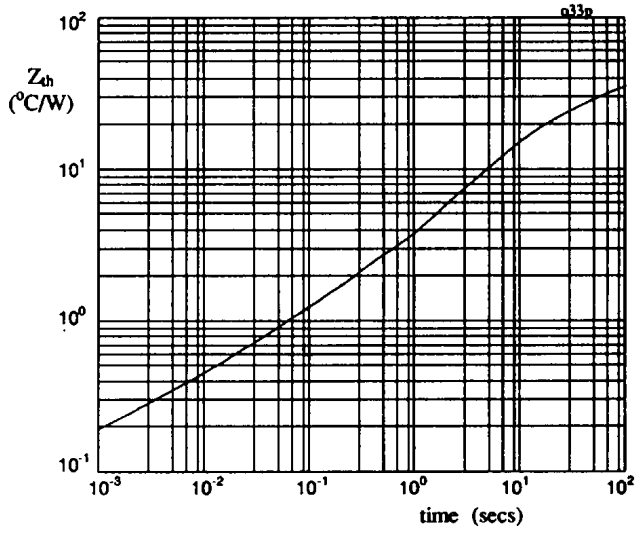

Fig 2. Transient thermal impedance characteristic per leg

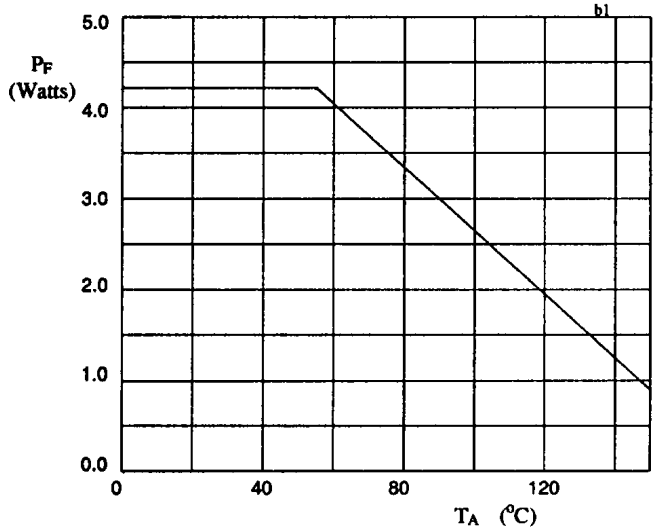

Fig 3. Power derating characteristics when p.c.b mounted