January 16, 1998

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

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

- Low forward voltage drop
- Low reverse leakage current
- Subminiature design
- Fast reverse recovery time
- Pcb mounting

QUICK REFERENCE DATA

- V_R = 50V - 600V
- I_F = 1.5A
- I_R = 2.0 µA
- t_{rr} = 150 - 250nS

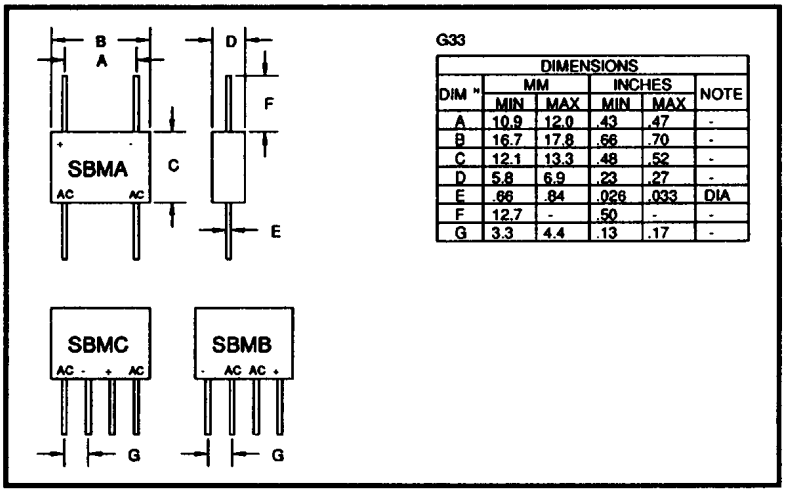
ABSOLUTE MAXIMUM RATINGS & CHARACTERISTICS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$		1 Cycle Surge Current I_{FSM} t_p = 8.3mS	Repetitive Surge Current I_{FRM}	Reverse Leakage Current I_R @ V_{RWM}		Forward Voltage drop V_F @ 1A/leg @ 25°C	Reverse Recovery Time t_{rr}
		@ 55°C	@ 100°C	@ 25°C	@ 25°C	@ 25°C	@ 100°C		@ 25°C
	Volts	Amps	Amps	Amps	Amps	µA	µA	Volts	nS
SBM*05F	50	1.5	1.0	25	10	2.0	50	1.2	150
SBM*1F	100	1.5	1.0	25	10	2.0	50	1.2	150
SBM*2F	200	1.5	1.0	25	10	2.0	50	1.2	150
SBM*4F	400	1.5	1.0	25	10	2.0	50	1.2	150
SBM*6F	600	1.5	1.0	25	10	2.0	50	1.2	250

* Add A, B, C for desired circuit configuration (see Mechanical outline)

[1] Measured on discrete devices prior to assembly

MECHANICAL



G33

DIM "	DIMENSIONS MM MIN	MM MAX	INCHES MIN	INCHES MAX	NOTE
A	10.9	12.0	.43	.47	-
B	16.7	17.8	.66	.70	-
C	12.1	13.3	.48	.52	-
D	5.8	6.9	.23	.27	-
E	.66	.84	.026	.033	DIA
F	12.7	-	.50	-	-
G	3.3	4.4	.13	.17	-

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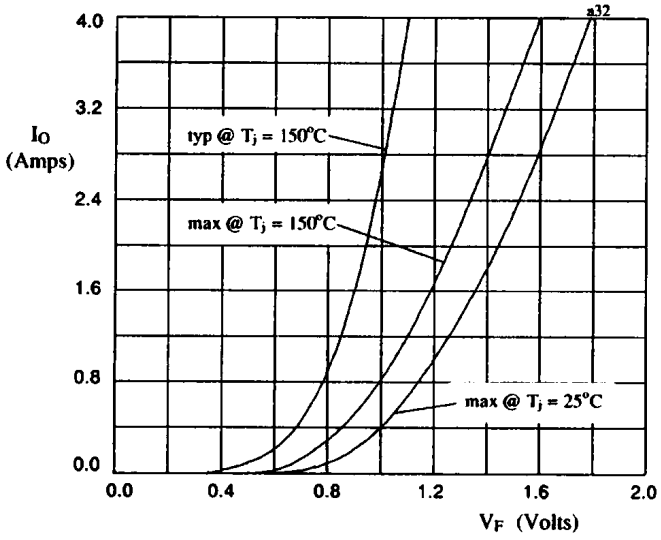


Fig 1. Forward voltage drop against output current per leg

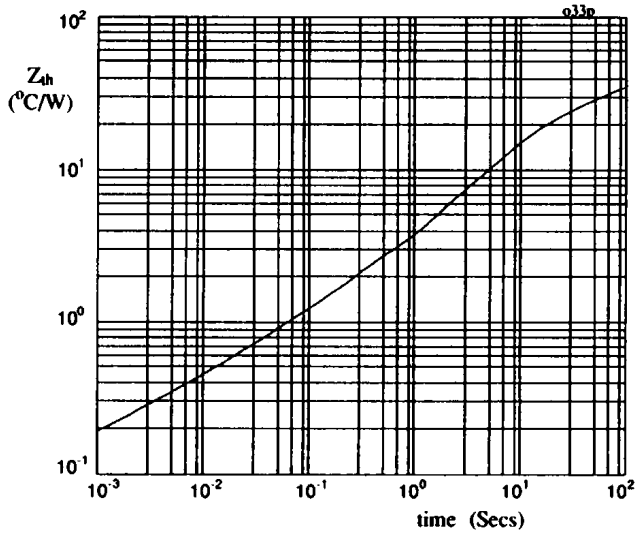


Fig 2. Transient thermal impedance characteristic per leg

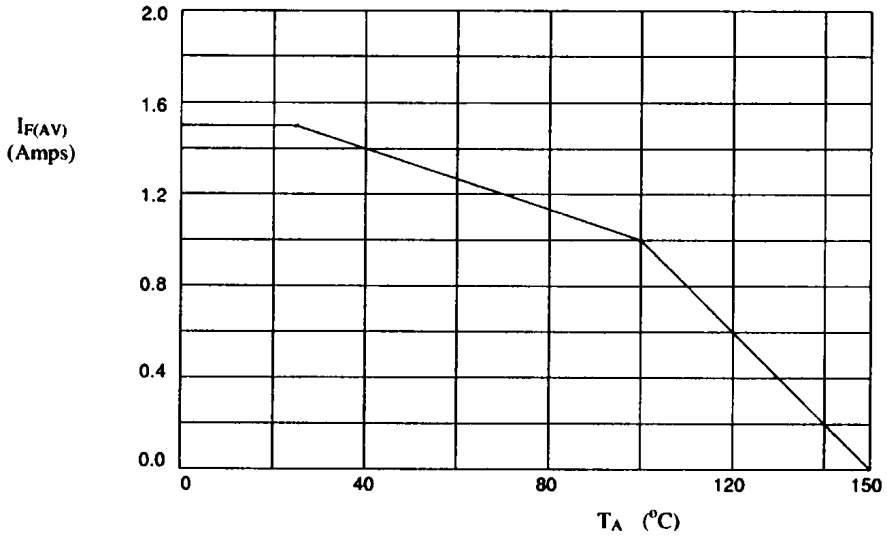


Fig 3. Maximum average forward current against ambient temperature.

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