

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

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

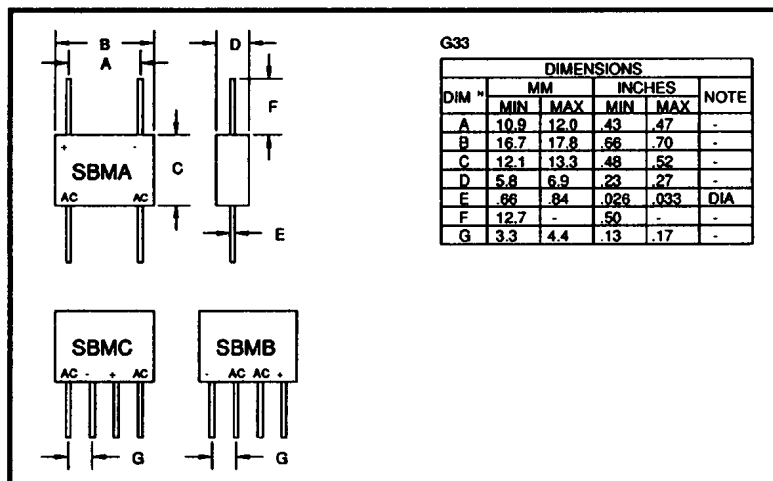
ABSOLUTE MAXIMUM RATINGS & CHARACTERISTICS

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 $V_F @ 1A/leg @ 25^\circ C$	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
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



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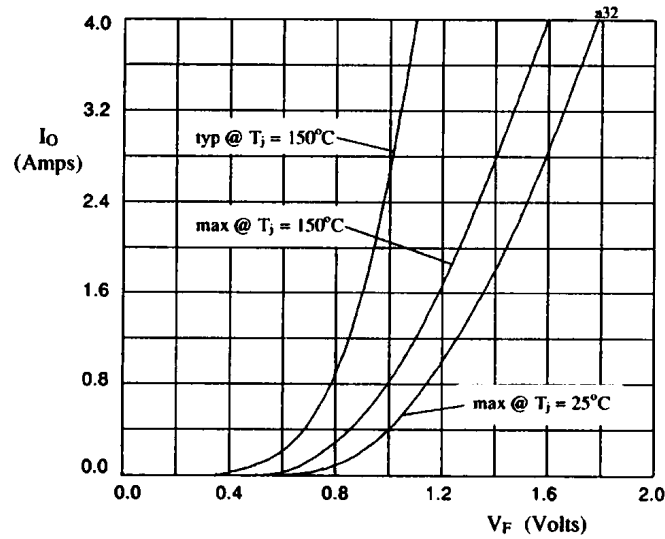


Fig 1. Forward voltage drop against output current per leg

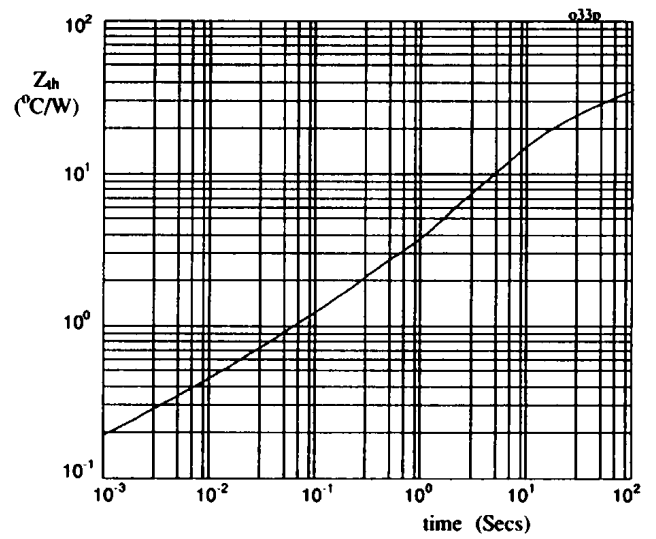


Fig 2. Transient thermal impedance characteristic per leg

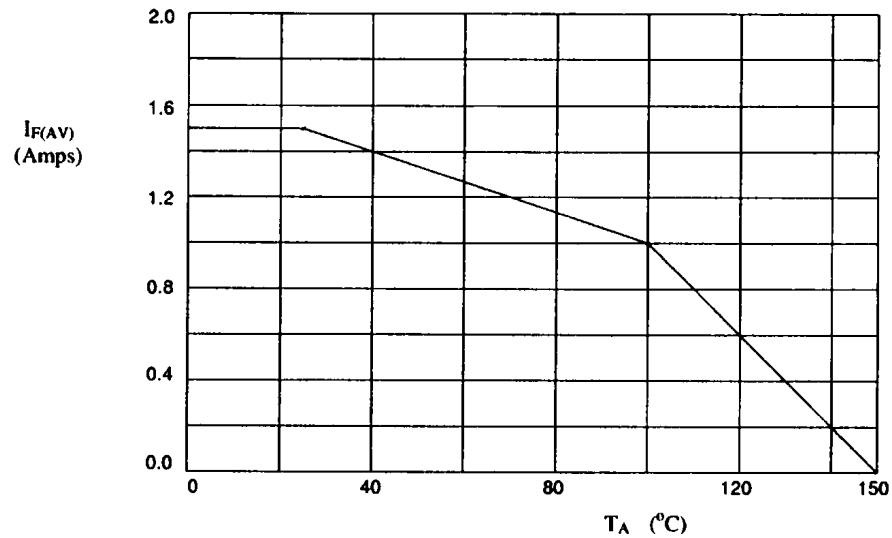


Fig 3. Maximum average forward current against ambient temperature.