

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

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

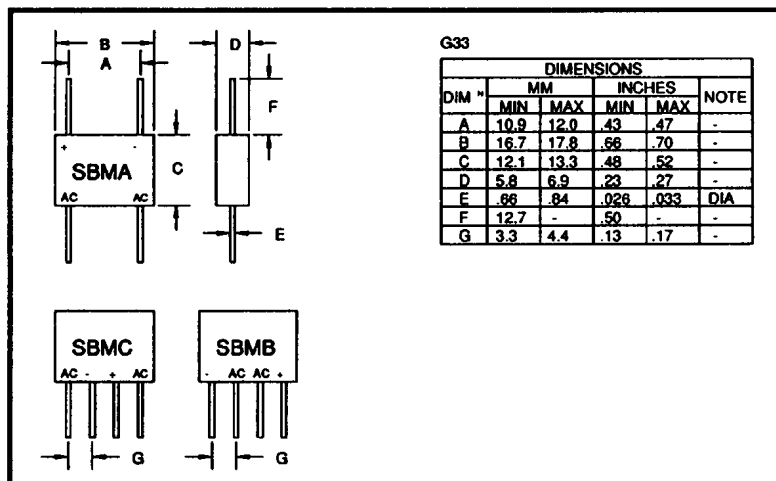
ABSOLUTE MAXIMUM RATINGS & CHARACTERISTICS

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	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



January 16, 1998

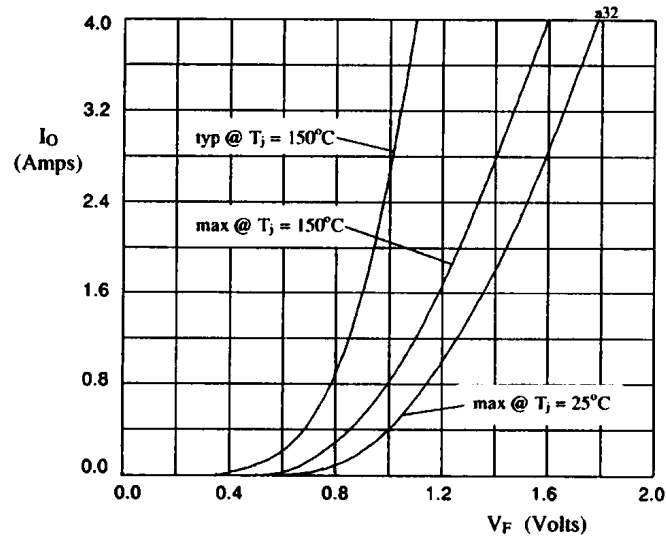


Fig 1. Forward voltage drop against output current per leg

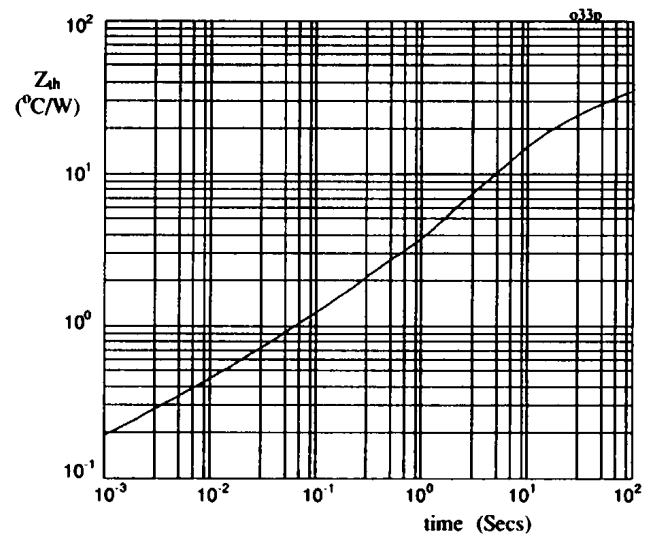


Fig 2. Transient thermal impedance characteristic per leg

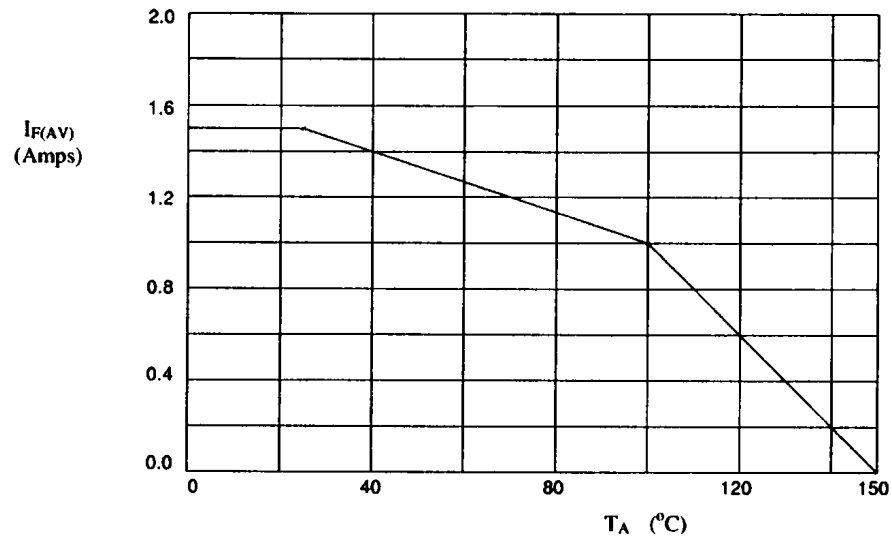


Fig 3. Maximum average forward current against ambient temperature.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Semtech:](#)

[SBMC1F](#) [SBMA4F](#) [SBMB6F](#) [SBMA1F](#) [SBMC6F](#) [SBMA05F](#) [SBMA2F](#) [SBMB4F](#) [SBMB1F](#) [SBMA6F](#)