

January 16, 1998

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

STANDARD RECOVERY, MEDIUM CURRENT 1-PHASE FULL WAVE BRIDGE RECTIFIER ASSEMBLIES

QUICK REFERENCE DATA

- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- Insulated electrical connections

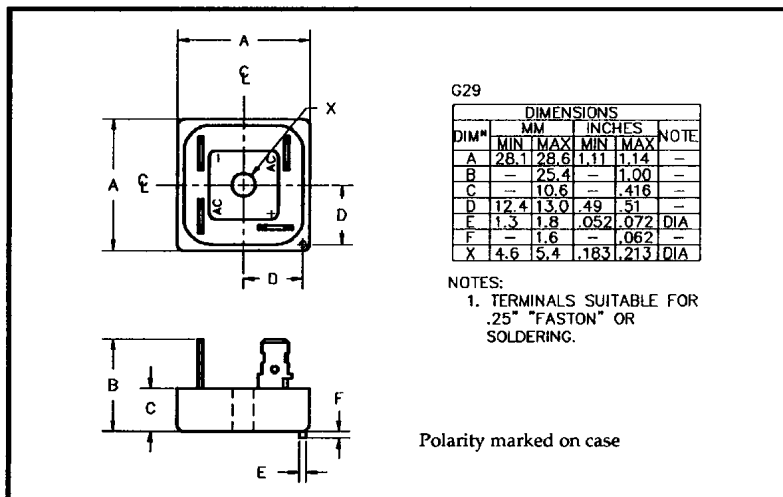
- $V_R = 200V - 600V$
- $I_F = 25A$
- $I_R = 2.0\mu A$
- $t_{rr} = 2.0\mu S$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$						1 Cycle Surge Current	
		(@ case temperature)			(@ ambient temperature)			$I_{FSM} t_p = 8.3mS$	
		@ 55°C	@ 100°C	@ 125°C	@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C
		Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SCBA2	200								
SCBA4	400	25	18.5	12.5	6.0	5.0	3.0	150	100
SCBA6	600								

$$R_{\theta JC} = 2.0^{\circ}C/W$$

MECHANICAL



SCBA6 is available in Europe to DEF STAN 59-61/90/207 release to F and FX levels.

January 16, 1998

ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current I_R @ V_{RWM}		Maximum Forward Voltage V_F @ 3A/leg	Reverse Recovery Time ¹ t_{rr} @ 25°C	Maximum operating & storage temp. range. T_{OP} T_{STG}
	@ 25°C	@ 100°C			
	µA	µA	Volts	µS	°C
SCBA2 SCBA4 SCBA6	2.0	40	1.0	2.0	-55 to +150

¹ Measured on discrete devices prior to assembly

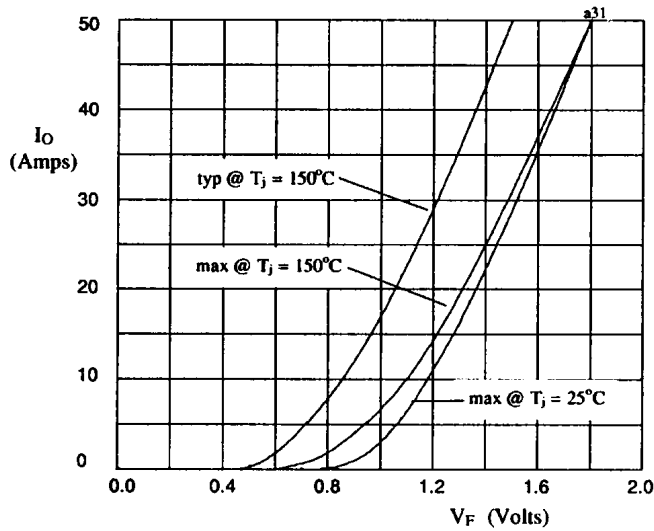


Fig 1. Forward voltage drop against output current per leg.

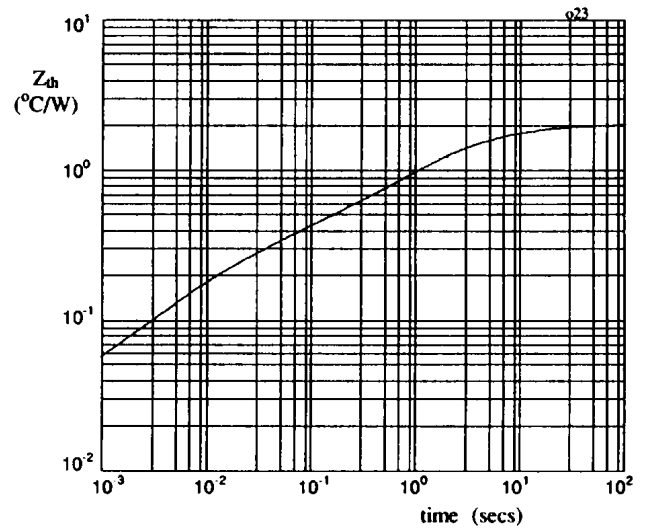


Fig 2. Transient thermal impedance characteristic per leg

Fig 3. Maximum insurge current against time constant for capacitive loads.

