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

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

QUICK REFERENCE DATA

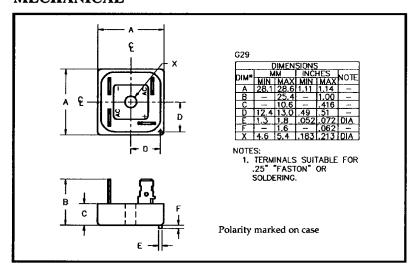
- $V_R = 200V 600V$
- $I_F = 25A$
- $I_R = 2.0 \mu A$
- $t_{rr} = 2.0 \mu S$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage VRWM	Average Rectified Current I _{F(AV)}						1 Cycle Surge Current	
		(@ case temperature)			(@ ambient temperature)			I_{FSM} $t_p = 8.3 \text{mS}$	
		@ 55°C	@ 100°C	@ 125°C	@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C
	Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SCBA2	200	ŧ	:						
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



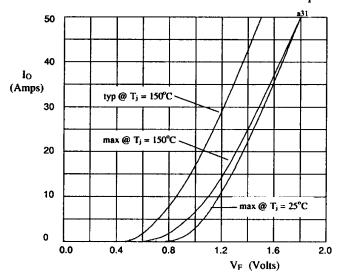
SCBA6 is available in Europe to DEF STAN 59-61/90/207 release to F and FX levels.

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ELECTRICAL CHARACTERISTICS

Device Type	Leakage	n Reverse Current V _{RWM}	Maximum Forward Voltage	Reverse Recovery Time ¹	Maximum operating & storage temp. range.	
	@ 25°C	@ 100°C	V _F @ 3A/leg	t _{rr} @ 25°C		
	μΑ	μΑ	Volts	μS	°C	
SCBA2 SCBA4 SCBA6	2.0	40	1.0	2.0	-55 to +150	

¹ Measured on discrete devices prior to assembly



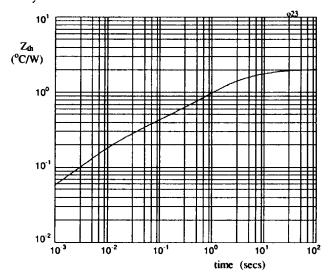


Fig 1. Forward voltage drop against output current per leg.

Fig 2. Transient thermal impedance characteristic per leg

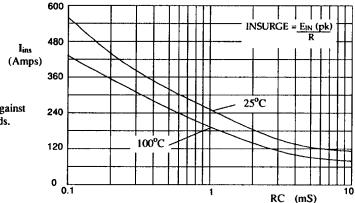


Fig 3. Maximum insurge current against time constant for capacitive loads.