

SEMTECH**STANDARD RECOVERY 1 PHASE
FULL WAVE BRIDGE RECTIFIERS****SCBA2
SCBA4
SCBA6**

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**STANDARD RECOVERY, MEDIUM CURRENT 1-PHASE
FULL WAVE BRIDGE RECTIFIER ASSEMBLIES****QUICK REFERENCE
DATA**

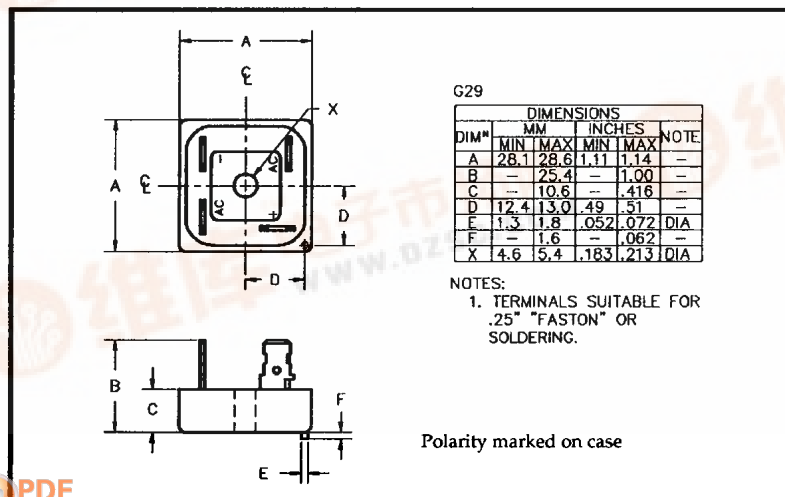
- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- Insulated electrical connections

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

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$						1 Cycle Surge Current	
		(@ case temperature)			(@ ambient temperature)			$I_{FSM} \quad t_p = 8.3ms$	
		@ 55°C	@ 100°C	@ 125°C	@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C
	Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps	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.

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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_{OR} 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

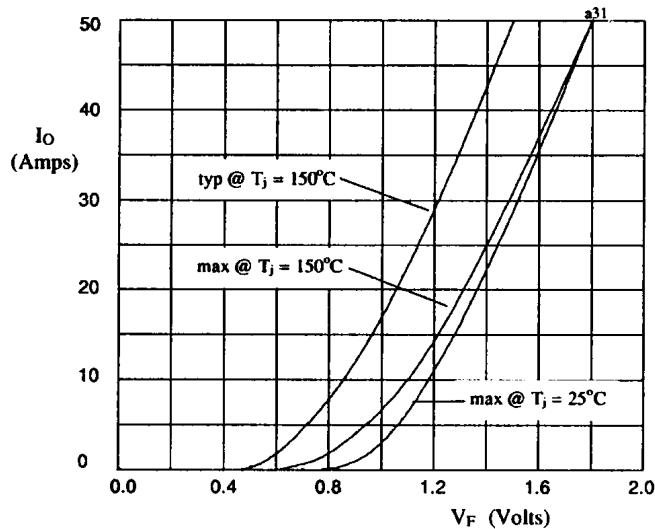


Fig 1. Forward voltage drop against output current per leg.

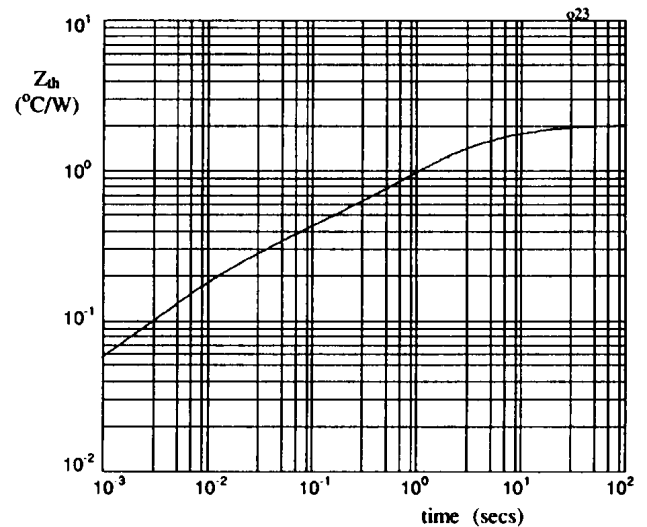


Fig 2. Transient thermal impedance characteristic per leg

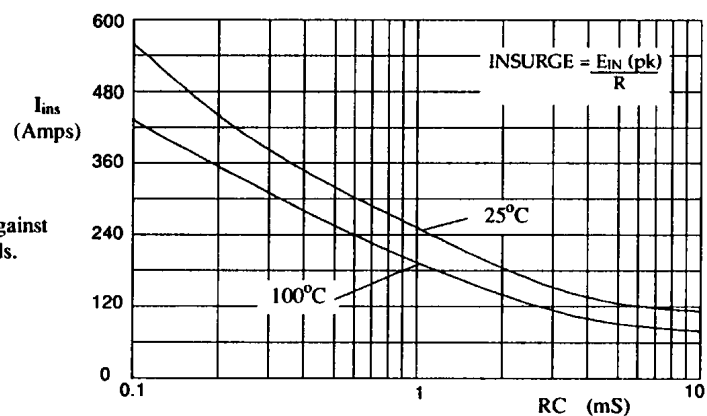


Fig 3. Maximum insurge current against time constant for capacitive loads.