

SEMTECH**STANDARD RECOVERY 1 PHASE
FULL WAVE BRIDGE RECTIFIERS****SCBH2
SCBH4
SCBH6**

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

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

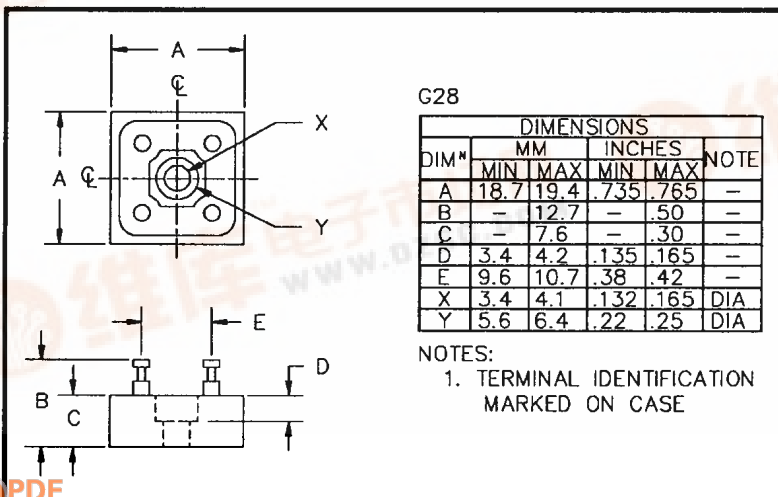
**QUICK REFERENCE
DATA**

- $V_R = 200V - 600V$
- $I_F = 12A$
- $I_R = 2.0\mu A$
- $t_{rr} = 2.0\mu S$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V _{RWM}	Average Rectified Current I _{F(AV)}						1 Cycle Surge Current I _{FSM} t _p = 8.3mS		Repetitive Surge Current I _{FRM}
		(@ case temperature)			(@ ambient temperature)			@ 25°C	@ 100°C	
		@ 55°C	@ 100°C	@ 125°C	@ 25°C	@ 55°C	@ 100°C			
	Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SCBH2	200									
SCBH4	400	12	9.0	8.5	4.0	3.0	1.7	150	100	50
SCBH6	600									

$$R_{\theta JC} = 3.3^{\circ}C/W$$

MECHANICAL

SCBH6 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_{OP} T_{STG}
	@ 25°C	@ 100°C			
	μA	μA	Volts	μS	°C
SCBH2 SCBH4 SCBH6	2.0	50	1.0	2.0	-55 to +150

¹ Measured on discrete devices prior to assembly

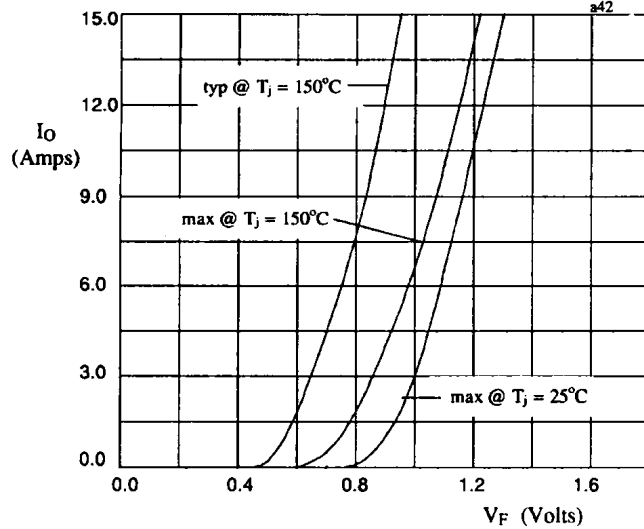


Fig 1. Forward voltage drop against output current per leg.

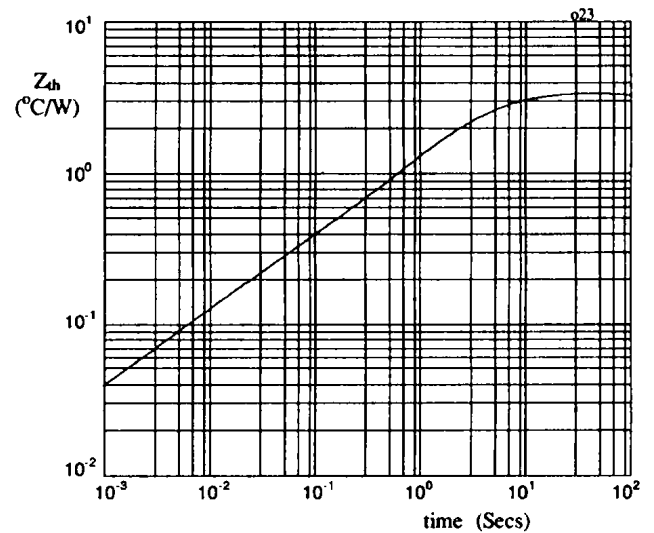


Fig 2. Transient thermal impedance characteristic per leg

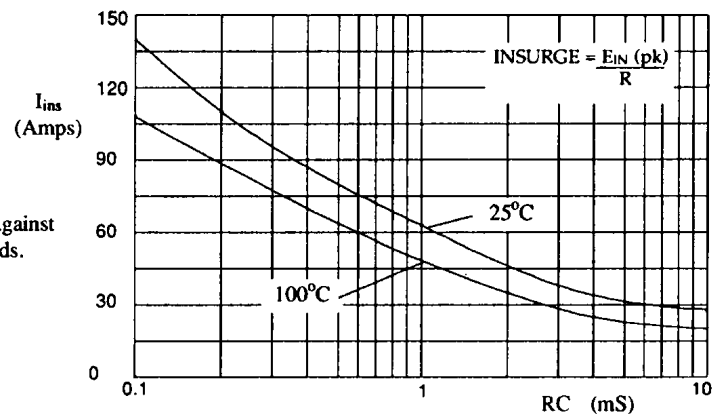


Fig 3. Maximum insurge current against time constant for capacitive loads.