

SEMTECH**SUPERFAST RECOVERY 1 PHASE
FULL WAVE BRIDGE RECTIFIERS****SCBH05FF
SCBH10FF
SCBH15FF**

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TEL:805-498-2111 FAX:805-498-3804 WEB:<http://www.semtech.com>**SUPERFAST RECOVERY, LOW CURRENT 1-PHASE
FULL WAVE BRIDGE RECTIFIER ASSEMBLIES****QUICK REFERENCE
DATA**

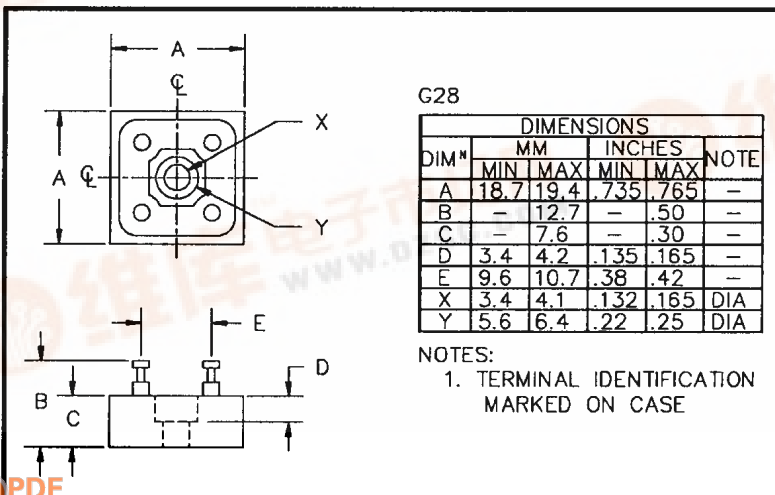
- Very fast reverse recovery time
- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance

- $V_R = 50V - 150V$
- $I_F = 12A$
- $V_F = 0.97V$
- $t_{rr} = 30nS$

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)					
		@ 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	Amps
SCBH05FF	50									
SCBH10FF	100	12	9	7.5	5	3.8	2	175	120	24
SCBH15FF	150									

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

MECHANICAL

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ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current I_R @ V_{RWM}		Maximum Forward Voltage V_F @ 5A/leg	Reverse Recovery Time ¹ t_{rr} @ 25°C	Maximum operating & storage temp. range. T_{OP} T_{STG}
	@ 25°C	@ 100°C			
	μA	mA			
SCBH05FF SCBH10FF SCBH15FF	20	1.0	0.97	30	- 55 to +150

¹ Measured on discrete devices prior to assembly

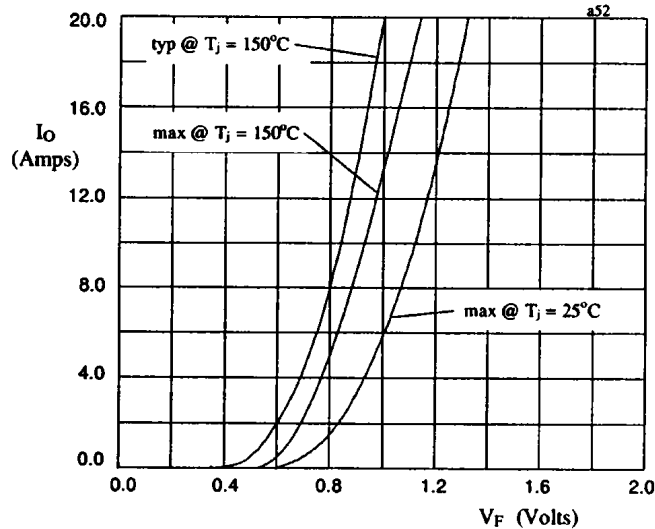


Fig 1. Forward voltage drop against output current per leg.

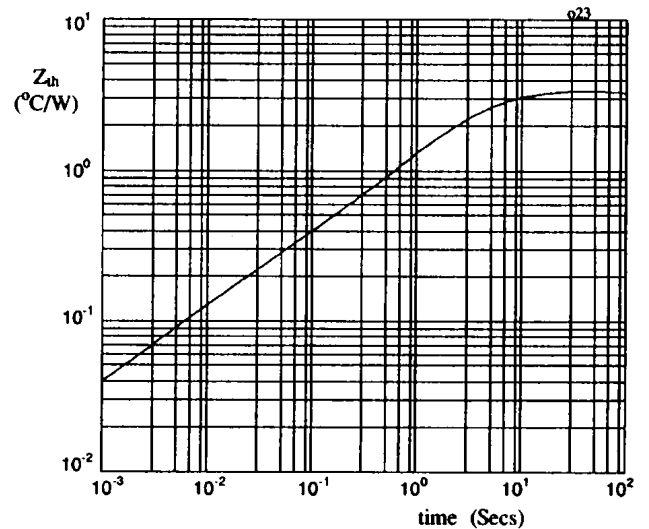


Fig 2. Transient thermal impedance characteristic per leg

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

