

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

- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- High surge ratings

QUICK REFERENCE DATA

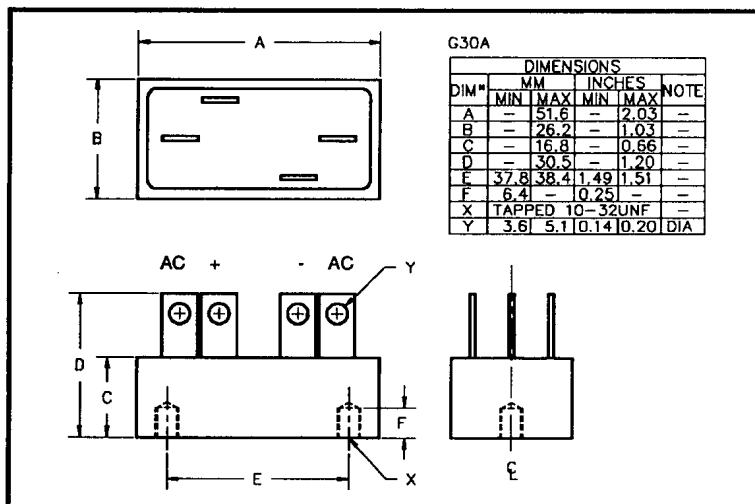
- $V_R = 50V - 600V$
- $I_F = 38A$
- $I_R = 8.0\mu A$
- $I_{FSM} = 500A$

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	
SCBK05	50									
SCBK1	100									
SCBK2	200	38	24	17.5	13	10	6	500	325	80
SCBK4	400									
SCBK6	600									

$$R_{\theta JC} = 1.2^{\circ}C/W$$

MECHANICAL



January 16, 1998

ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current $I_R @ V_{RWM}$		Maximum Forward Voltage $V_F @ 12A/leg$	Reverse Recovery Time ¹ $t_{rr} @ 25^\circ C$	Maximum operating & storage temp. range. $T_{OP} T_{STG}$	
	@ 25°C	@ 100°C			°C	
	µA	µA	Volts	µS		
SCBK05 SCBK1 SCBK2 SCBK4 SCBK6	8.0	200	1.0	2.0	-55 to +150	

¹ Measured on discrete devices prior to assembly

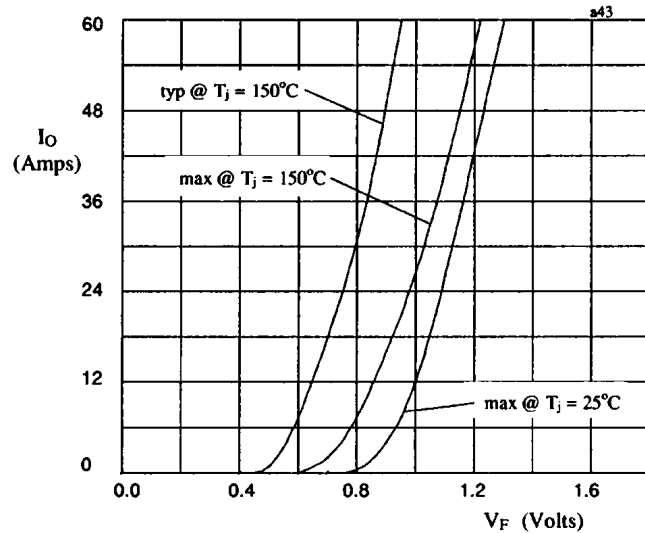


Fig 1. Forward voltage drop against output current per leg.

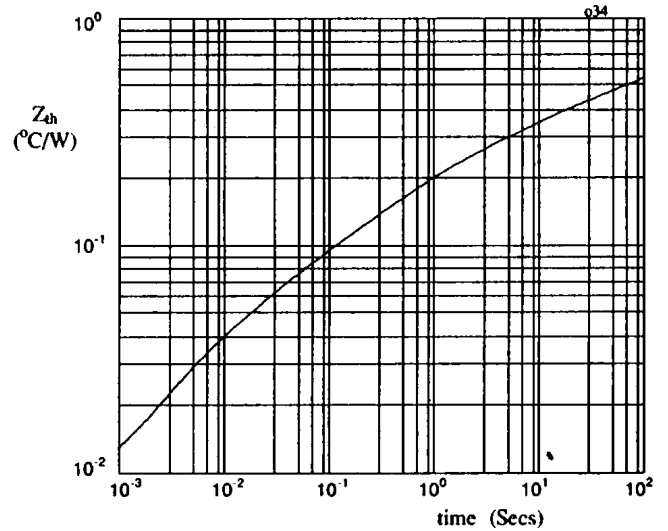


Fig 2. Transient thermal impedance characteristic per leg

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Semtech:](#)

[SCBK6](#) [SCBK2](#) [SCBK8](#)