

January 16, 1998

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

QUICK REFERENCE DATA

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

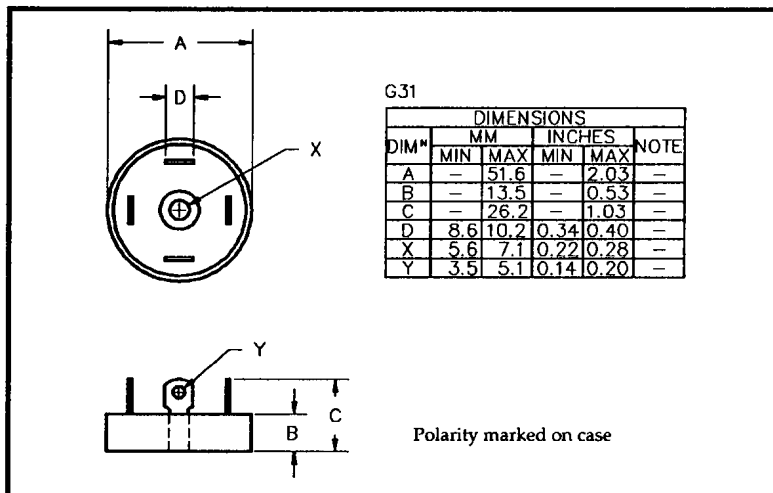
- $V_R = 50V - 1000V$
- $I_F = 53A$
- $I_R = 6.0 \mu A$
- $t_{rr} = 2.0\mu S$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$						1 Cycle Surge Current	
		(@ case temperature)			(@ ambient temperature)			$I_{FSM} t_p = 8.3mS$	
		@ 55°C	@ 100°C	@ 125°C	@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C
		Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SCBAR05	50								
SCBAR1	100								
SCBAR2	200								
SCBAR4	400	53	35	25	9.5	7.0	4.5	375	250
SCBAR6	600								
SCBAR8	800								
SCBAR10	1000								

$$R_{\theta JC} = 0.7^{\circ}C/W$$

MECHANICAL



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ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current $I_R @ V_{RWM}$		Maximum Forward Voltage $V_F @ 9A/leg$	Reverse Recovery Time ¹ $t_{rr} @ 25^\circ C$	Maximum operating & storage temp. range. $T_{OP} T_{STG}$
	@ 25°C	@ 100°C			
	μA	μA	Volts	μS	°C
SCBAR05 SCBAR1 SCBAR2 SCBAR4 SCBAR6 SCBAR8 SCBAR10	6.0	240	1.0	2.0	-55 to +150

¹ Measured on discrete devices prior to assembly

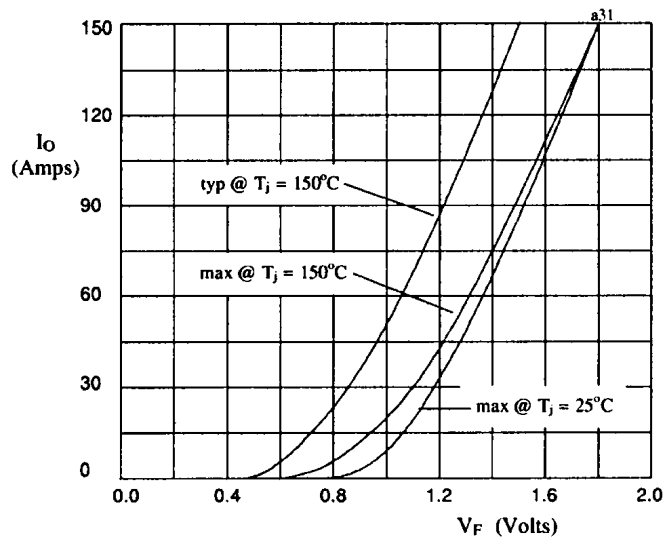


Fig 1. Forward voltage drop against output current per leg.

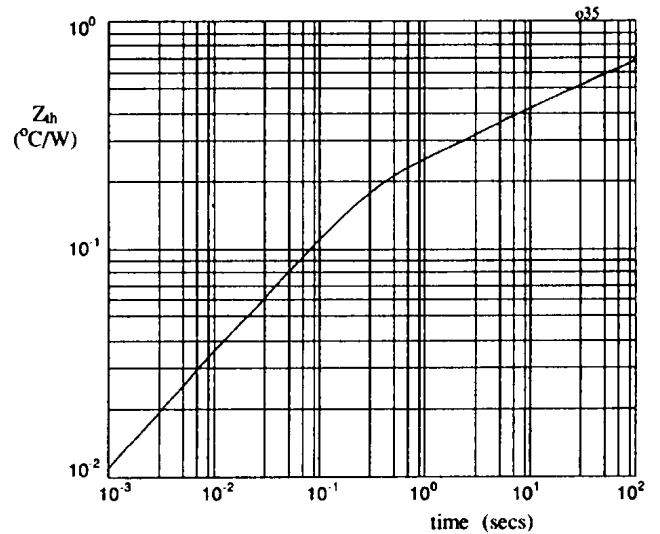


Fig 2. Transient thermal impedance characteristic per leg