

January 16, 1998

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

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

QUICK REFERENCE DATA

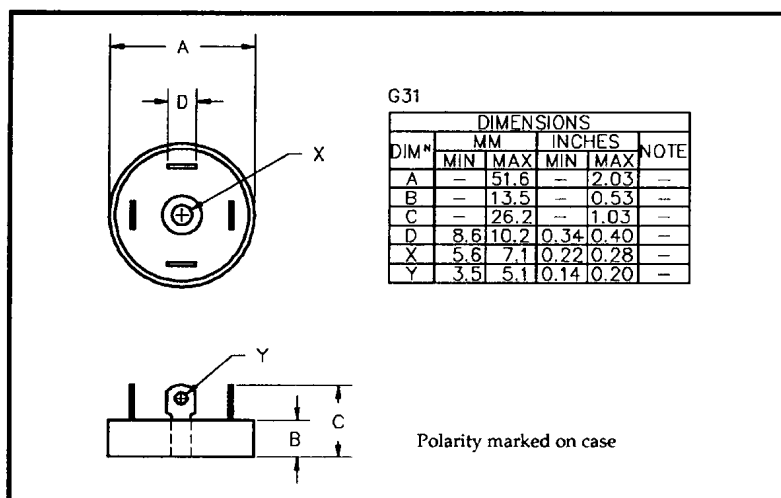
- $V_R = 50V - 150V$
- $I_F = 55A$
- $V_F = 0.97V$
- $t_{rr} = 30nS$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$						1 Cycle Surge Current	
		(@ 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	Amps
SCBAR05FF	50								
SCBAR10FF	100	55	37	22	9.0	6.75	4.3	450	375
SCBAR15FF	150								

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

MECHANICAL



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ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current $I_R @ V_{RWM}$		Maximum Forward Voltage $V_F @ 15A/leg$	Reverse Recovery Time ¹ $t_{rr} @ 25^\circ C$	Maximum operating & storage temp. range. $T_{OP} T_{STG}$
	@ 25°C	@ 100°C			
	μA	mA	Volts	nS	°C
SCBAR05FF SCBAR10FF SCBAR15FF	60	3.0	0.97	30	- 55 to +150

¹ Measured on discrete devices prior to assembly

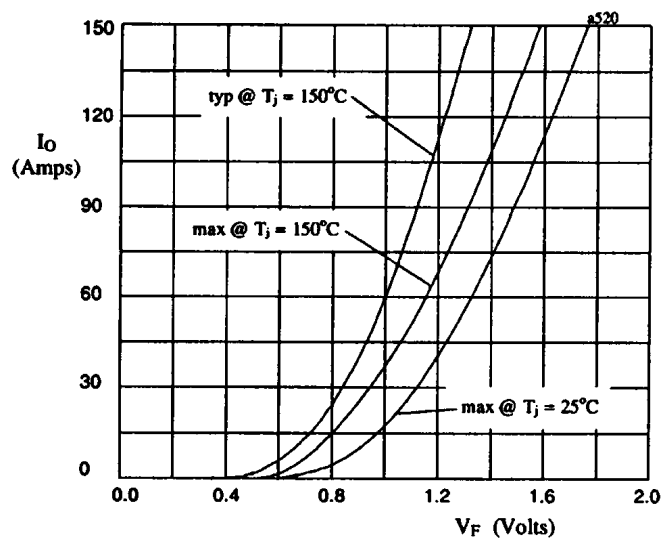


Fig 1. Forward voltage drop against output current per leg.

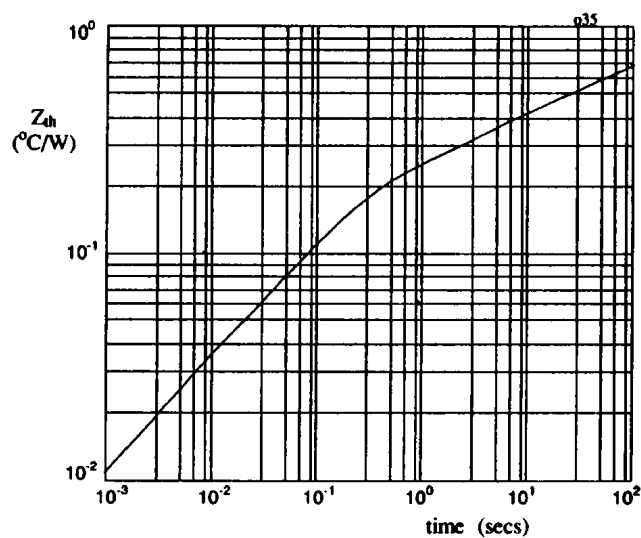


Fig 2. Transient thermal impedance characteristic per leg