

January 9, 1998

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SUPERFAST RECOVERY, HIGH CURRENT CENTER TAP AND DOUBLER RECTIFIER ASSEMBLIES

QUICK REFERENCE DATA

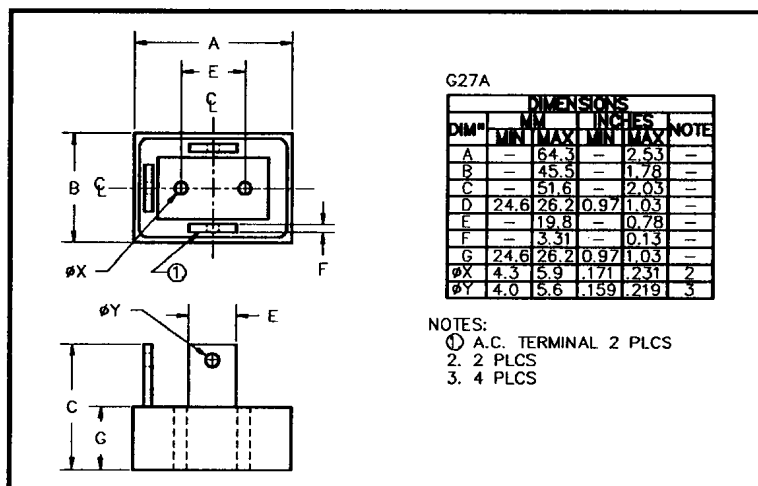
- Low forward voltage drop
- Low reverse leakage current
- Very fast reverse recovery time
- Low thermal impedance
- High forward and surge currents

- $V_R = 50V - 150V$
- $I_F = 85A$
- $t_{rr} = 30nS$
- $V_F = 0.97V$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current (@ case temperature)			1 Cycle Surge Current $t_p = 8.3mS$		Repetitive Surge Current @ 25°C
		@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C	
	Volts	Amps	Amps	Amps	Amps	Amps	Amps
SCDAS05FF	50	42.5	35	22.5	900	700	135
SCDAS10FF	100						
SCDAS15FF	150						
SCNAS05FF	50	85	70	45	900	700	135
SCNAS10FF	100						
SCNAS15FF	150						
SCPAS05FF	50	85	70	45	900	700	135
SCPAS10FF	100						
SCPAS15FF	150						

MECHANICAL



Maximum thermal impedance
 $R_{\theta JC} = 0.80^{\circ}C/W$

Approximate mass = 245g

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ELECTRICAL CHARACTERISTICS (ratings apply per leg)

Device Type	Reverse Current @ V_{RWM}		Maximum Forward Voltage V_F @ 30A @ 25°C	Maximum Reverse Recovery Time
	@ 25 °C	@ 100 °C		
	μA	μA	Volts	nS
SCDAS05FF SCDAS10FF SCDAS15FF	60	3.0	0.97	30
SCNAS05FF SCNAS10FF SCNAS15FF	60	3.0	0.97	
SCPAS05FF SCPAS10FF SCPAS15FF	60	3.0	0.97	

¹ Measured on discrete devices prior to assembly

Operating temperature range -55 °C to +150 °C
Storage temperature range -55 °C to +150 °C

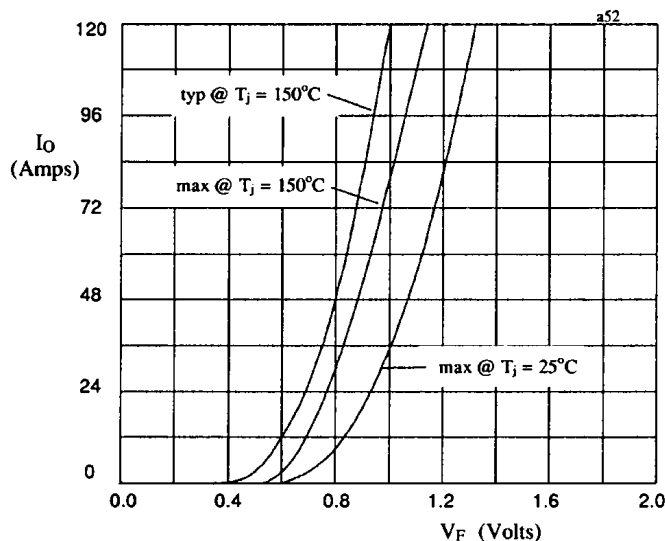


Fig 1. Forward voltage drop against current (per leg)

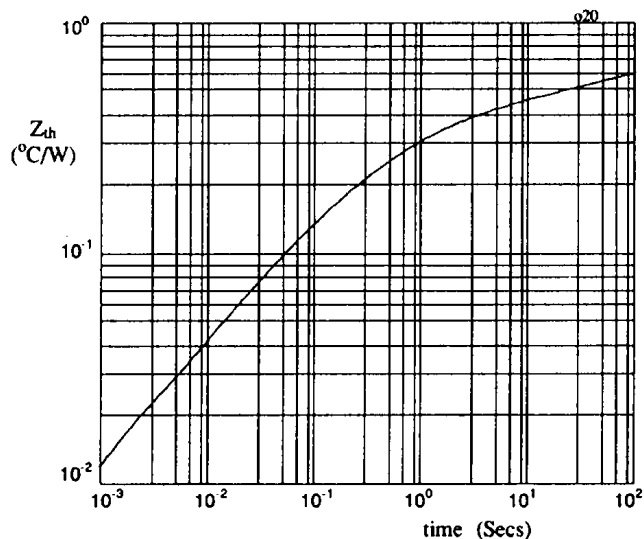


Fig 2. Transient thermal impedance characteristic per leg