

## SUPERFAST RECOVERY, HIGH CURRENT CENTER TAP AND DOUBLER RECTIFIER ASSEMBLIES

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

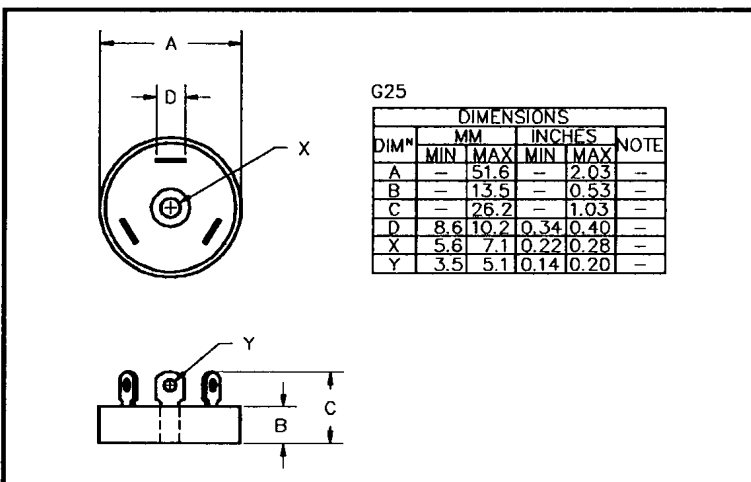
## QUICK REFERENCE DATA

- $V_R = 50V - 150V$
- $I_F = 45A$
- $t_{rr} = 30nS$
- $V_F = 0.97V$

## 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
SCDAR05FF	50	22.5	17.5	10	450	375	70
SCDAR10FF	100						
SCDAR15FF	150						
SCNAR05FF	50	45	35	20	450	375	70
SCNAR10FF	100						
SCNAR15FF	150						
SCPAR05FF	50	45	35	20	450	375	70
SCPAR10FF	100						
SCPAR15FF	150						

## MECHANICAL



Maximum thermal impedance  
 $R_{\theta JC} = 1.5^{\circ}C/W$

Approximate mass = 75g

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**ELECTRICAL CHARACTERISTICS** (ratings apply per leg)

Device Type	Reverse Current @ $V_{RWM}$		Maximum Forward Voltage $V_F @ 15.0A$ @ 25°C	Maximum Reverse Recovery Time
	@ 25 °C	@ 100 °C		
	μA	mA	Volts	nS
SCDAR05FF SCDAR10FF SCDAR15FF	30	1.5	0.97	↑ 30 ↓
SCNAR05FF SCNAR10FF SCNAR15FF	30	1.5	0.97	
SCPAR05FF SCPAR10FF SCPAR15FF	30	1.5	0.97	

<sup>1</sup> Measured on discrete devices prior to assembly

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

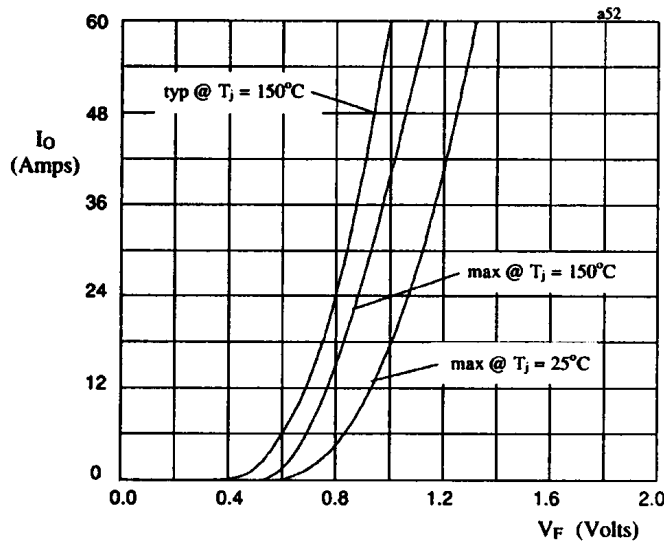


Fig 1. Forward voltage drop against current (per leg)

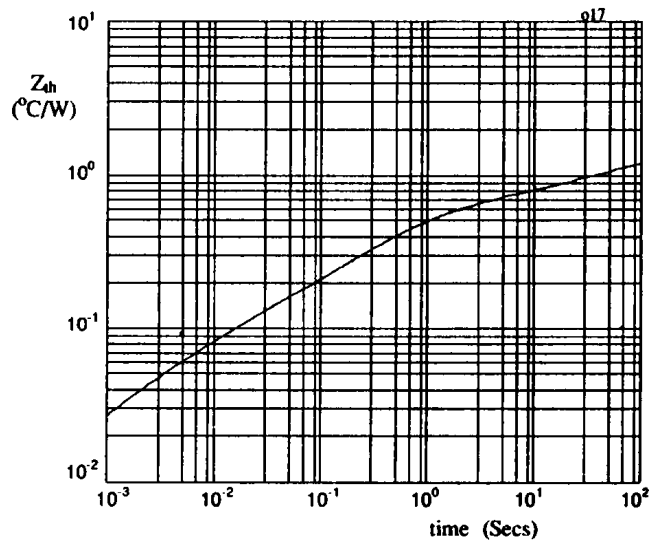


Fig 2. Transient thermal impedance characteristic per leg