

January 9, 1998

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

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

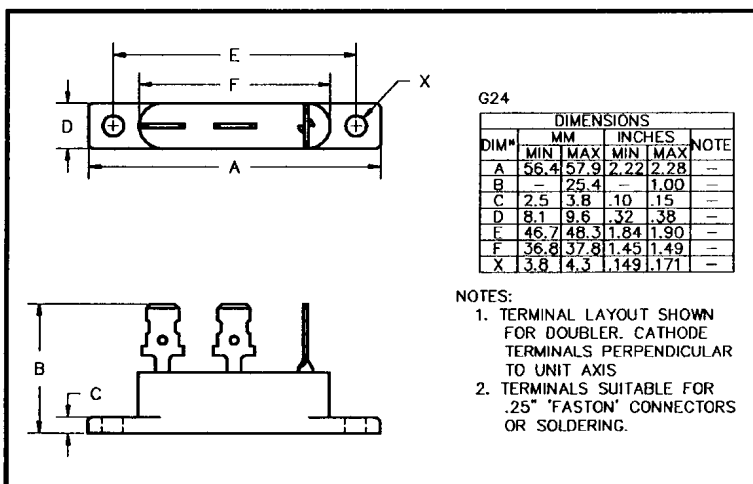
### QUICK REFERENCE DATA

- $V_R = 50V - 150V$
- $I_F = 15A$
- $I_R = 10\mu A$
- $t_{rr} = 30nS$

### ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage $V_{RWM}$	Average Rectified Current						1 Cycle Surge Current $t_p = 8.3mS$		Repetitive Surge Current 25°C
		(@ 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	Amps		
SCDA05FF	50									
SCDA10FF	100	7.5	5.0	2.5	2.25	1.75	1.0	175	120	24
SCDA15FF	150									
SCNA05FF	50									
SCNA10FF	100	15	10	5	4.5	3.5	2.0	175	120	24
SCNA15FF	150									
SCPA05FF	50									
SCPA10FF	100	15	10	5	4.5	3.5	2.0	175	120	24
SCPA15FF	150									

### MECHANICAL



Maximum thermal impedance  
 $R_{\theta JC} = 4^{\circ}C/W$

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### ELECTRICAL CHARACTERISTICS (ratings apply per leg)

Device Type	Reverse Current @ $V_{RWM}$		Maximum Forward Voltage $V_F @ 5.0A$ @ 25°C	Maximum Reverse Recovery Time
	@ 25 °C	@ 100 °C		
	μA	μA	Volts	nS
SCDA05FF SCDA10FF SCDA15FF	10	500	0.97	30
SCNA05FF SCNA10FF SCNA15FF	10	500	0.97	
SCPA05FF SCPA10FF SCPA15FF	10	500	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

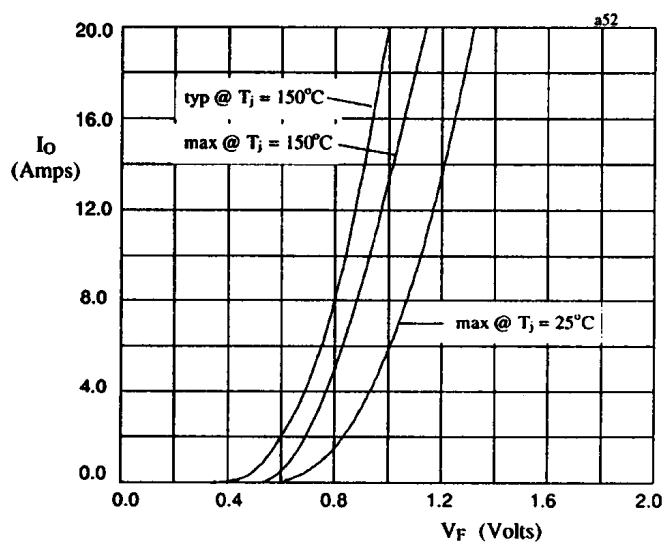


Fig 1. Forward voltage drop against current (per leg)

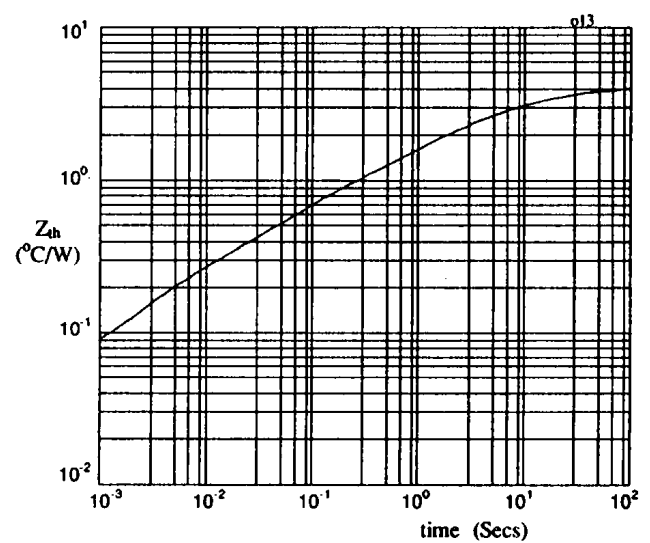


Fig 2. Transient thermal impedance characteristic per leg

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