

January 9, 1998

TEL:805-498-2111 FAX:805-498-3804 WEB:http://www.semtech.com

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

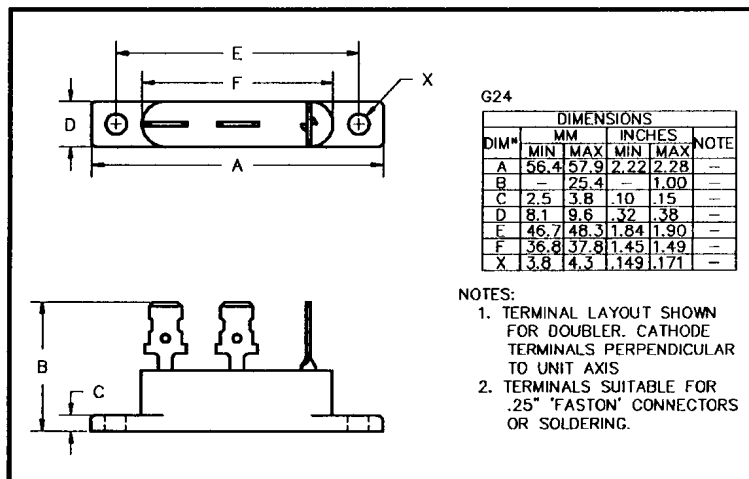
- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- Very low reverse recovery time

**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	
SCDA05FF SCDA10FF SCDA15FF	50 100 150	7.5	5.0	2.5	2.25	1.75	1.0	175	120	24
SCNA05FF SCNA10FF SCNA15FF	50 100 150	15	10	5	4.5	3.5	2.0	175	120	24
SCPA05FF SCPA10FF SCPA15FF	50 100 150	15	10	5	4.5	3.5	2.0	175	120	24

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 ¹
	@ 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	

¹ Measured on discrete devices prior to assembly

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

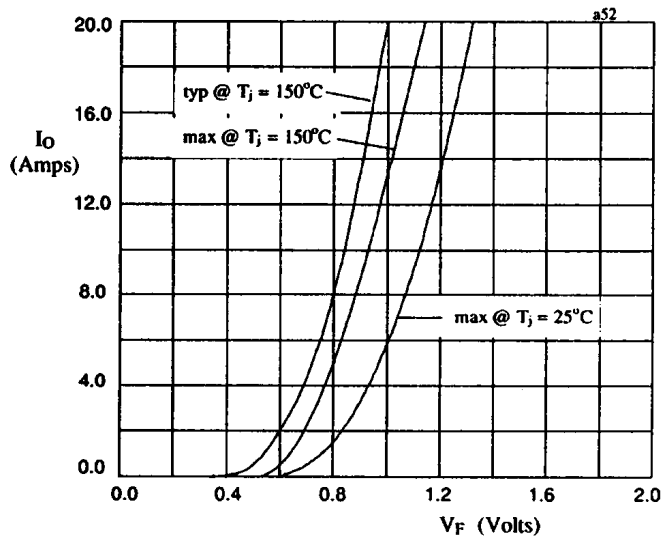


Fig 1. Forward voltage drop against current (per leg)

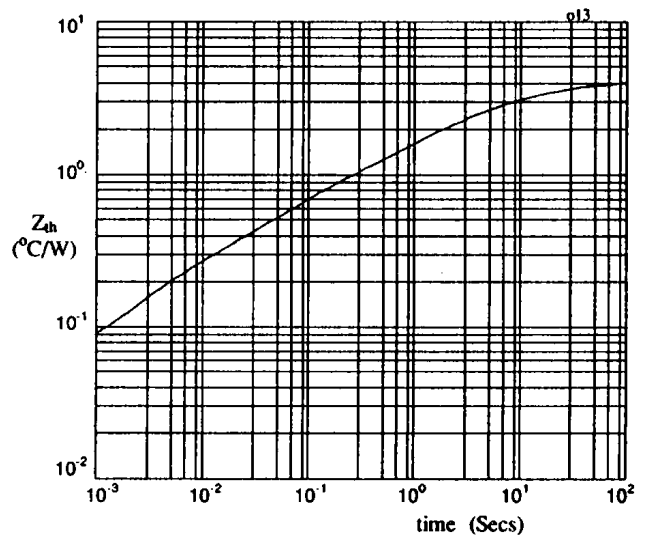


Fig 2. Transient thermal impedance characteristic per leg