

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

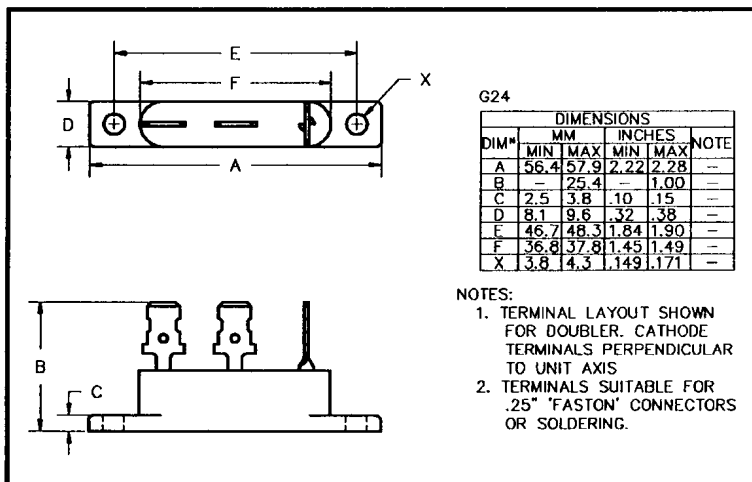
QUICK REFERENCE DATA

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

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V _{RWM}	Average Rectified Current						1 Cycle Surge Current t _p = 8.3mS		Repetitive Surge Current
		(@ case temperature)			(@ ambient temperature)					
		55°C	100°C	125°C	25°C	55°C	100°C	25°C	100°C	25°C
	Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SCDA05FF	50	7.5	5.0	2.5	2.25	1.75	1.0	175	120	24
SCDA10FF	100									
SCDA15FF	150									
SCNA05FF	50	15	10	5	4.5	3.5	2.0	175	120	24
SCNA10FF	100									
SCNA15FF	150									
SCPA05FF	50	15	10	5	4.5	3.5	2.0	175	120	24
SCPA10FF	100									
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 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

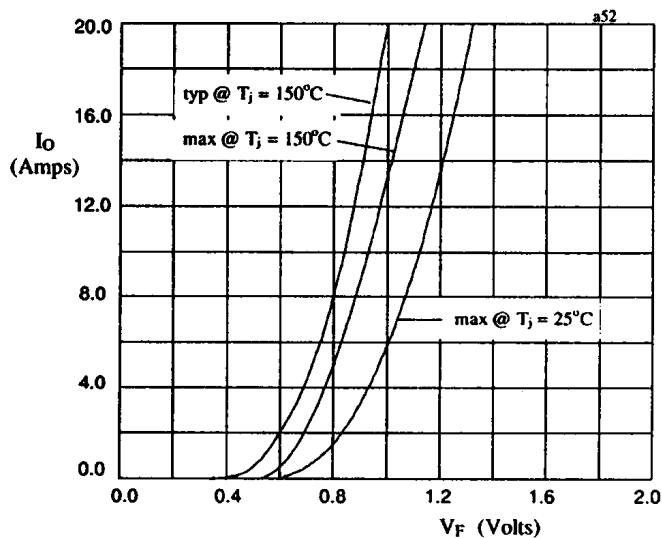


Fig 1. Forward voltage drop against current (per leg)

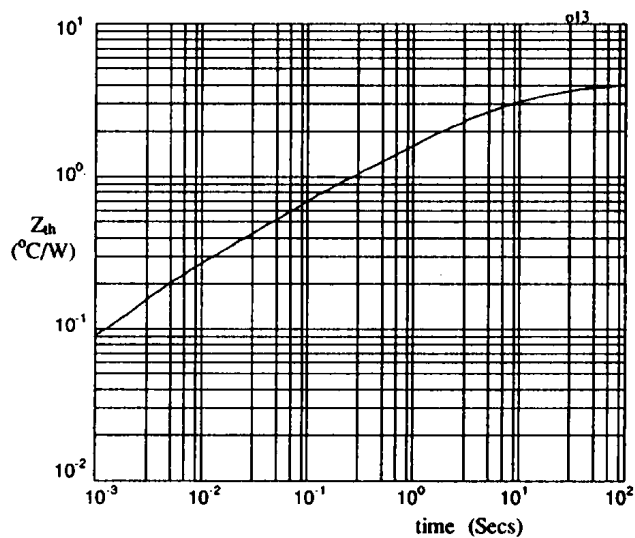


Fig 2. Transient thermal impedance characteristic per leg