

January 9, 1998

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

STANDARD RECOVERY, HIGH CURRENT CENTERTAP AND DOUBLER RECTIFIER ASSEMBLIES

- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- High forward current rating

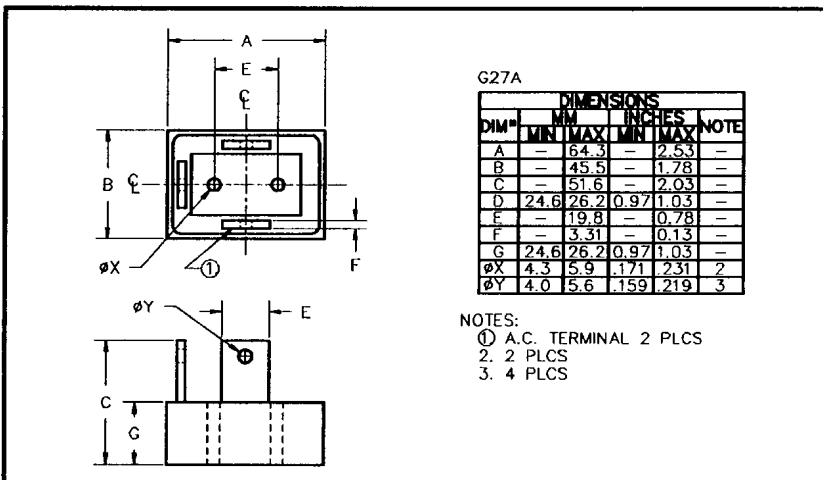
QUICK REFERENCE DATA

- $V_R = 50V - 600V$
- $I_F = 85A$
- $I_R = 6.0\mu A$
- $V_F = 1.0V$

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	@ 55°C	@ 100°C	@ 25°C	@ 100°C	@ 25°C
		Volts	Amps	Amps	Amps	Amps	Amps
SCDAS05	50	↑	↑	↑	↑	↑	↑
SCDAS1	100						
SCDAS2	200	42.5	35	22.5	900	600	120
SCDAS4	400						
SCDAS6	600	↓	↓	↓	↓	↓	↓
SCNAS05 SCPAS05	50	↑	↑	↑	↑	↑	↑
SCNAS1 SCPAS1	100						
SCNAS2 SCPAS2	200	85.0	70	45.0	900	600	120
SCNAS4 SCPAS4	400						
SCNAS6 SCPAS6	600	↓	↓	↓	↓	↓	↓

MECHANICAL



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

Approximate mass = 245g

January 9, 1998

ELECTRICAL CHARACTERISTICS (ratings apply per leg)

Device Type	Reverse Current @ V_{RWM}		Maximum Forward Voltage $V_F @ 18.0A$ @ 25°C	Maximum Reverse Recovery Time
	@ 25 °C	@ 100 °C		
	μA	μA	Volts	μS
SCDAS05 SCDAS1 SCDAS2 SCDAS4 SCDAS6	6.0	120	1.0	2.0
SCNAS05 SCPAS05 SCNAS1 SCPAS1 SCNAS2 SCPAS2 SCNAS4 SCPAS4 SCNAS6 SCPAS6	6.0	120	1.0	

¹ Measured on discrete devices prior to assembly

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

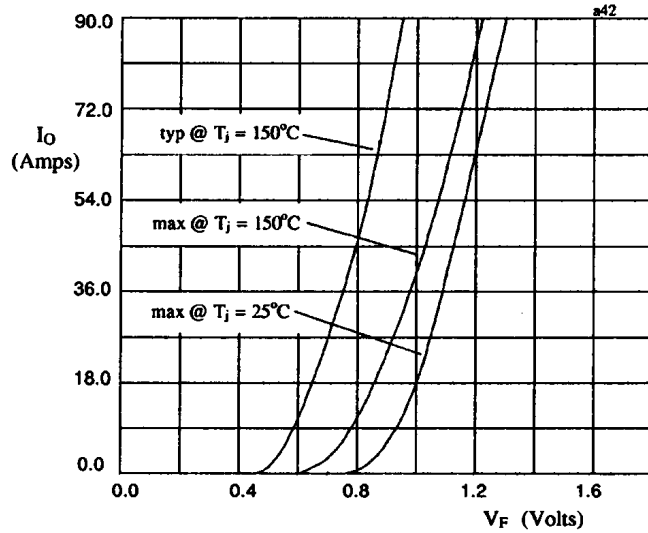


Fig 1. Forward voltage drop against output current (per leg)

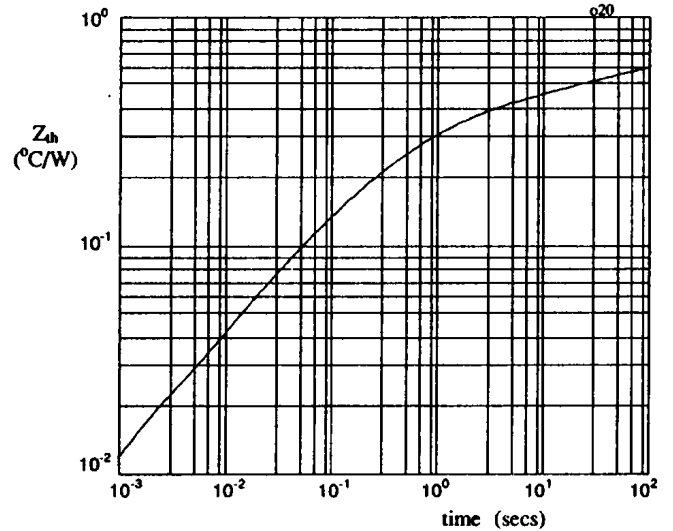


Fig 2. Transient thermal impedance characteristic per leg