

**SUPERFAST RECOVERY, HIGH CURRENT CENTERTAP
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

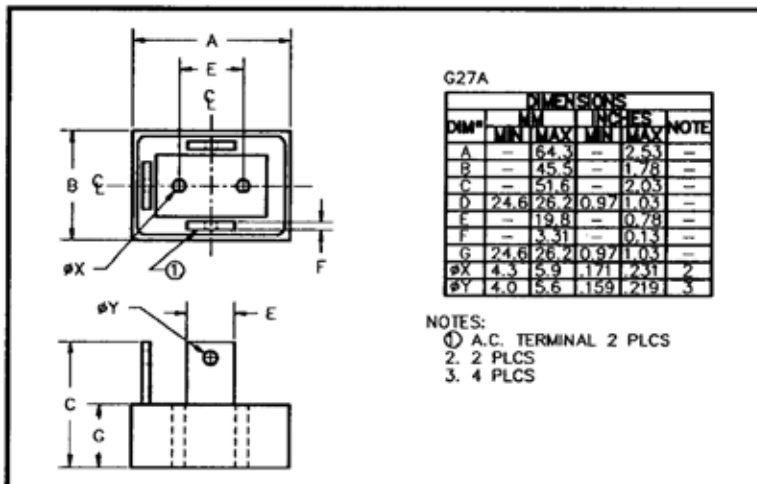
**QUICK REFERENCE
DATA**

- $V_R = 50V - 150V$
- $I_F = 85A$
- $t_{rr} = 30ns$
- $V_F = 0.97V$

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 |
| SCDAS05FF | 50 | 42.5 | 35 | 22.5 | 900 | 700 | 135 |
| SCDAS10FF | 100 | | | | | | |
| SCDAS15FF | 150 | | | | | | |
| SCNAS05FF | 50 | 85 | 70 | 45 | 900 | 700 | 135 |
| SCNAS10FF | 100 | | | | | | |
| SCNAS15FF | 150 | | | | | | |
| SCPAS05FF | 50 | 85 | 70 | 45 | 900 | 700 | 135 |
| SCPAS10FF | 100 | | | | | | |
| SCPAS15FF | 150 | | | | | | |

MECHANICAL



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

Approximate mass = 245g

7

ELECTRICAL CHARACTERISTICS (ratings apply per leg)

| Device Type | Reverse Current @ V_{RWM} | | Maximum Forward Voltage $V_F @ 30A @ 25^\circ C$ | Maximum Reverse Recovery Time |
|-------------------------------------|-----------------------------|----------|--|--|
| | @ 25 °C | @ 100 °C | | |
| | μA | μA | Volts | nS |
| SCDAS05FF SCDAS10FF SCDAS15FF | 3.0 | 60 | 0.97 | <div style="display: flex; align-items: center; justify-content: center;"> ↑ ↓ </div> 30 |
| SCNAS05FF SCNAS10FF SCNAS15FF | 3.0 | 60 | 0.97 | |
| SCPAS05FF SCPAS10FF SCPAS15FF | 3.0 | 60 | 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

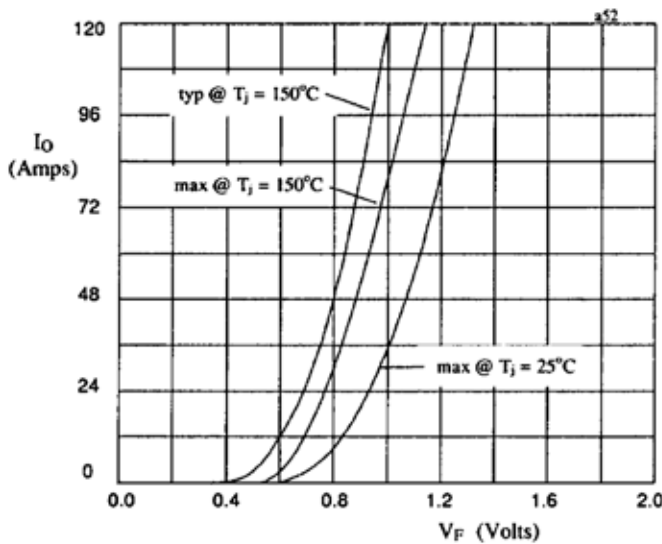


Fig 1. Forward voltage drop against current (per leg)

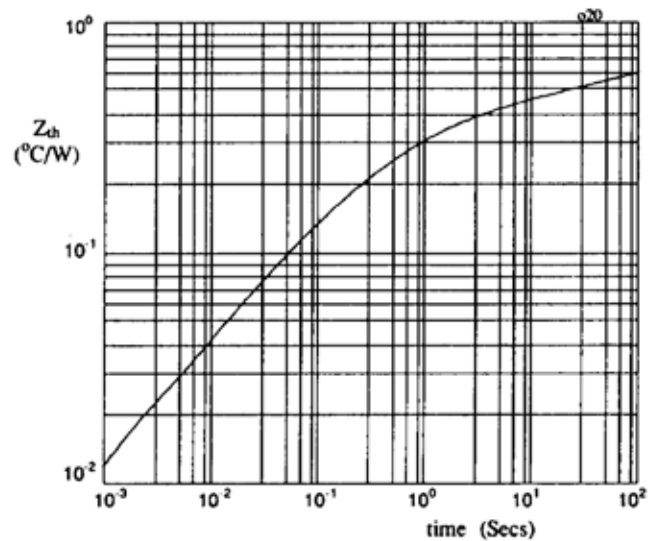


Fig 2. Transient thermal impedance characteristic per leg

7