



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## FAST RECOVERY, MEDIUM CURRENT 1-PHASE FULL WAVE BRIDGE RECTIFIER ASSEMBLIES

## QUICK REFERENCE DATA

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

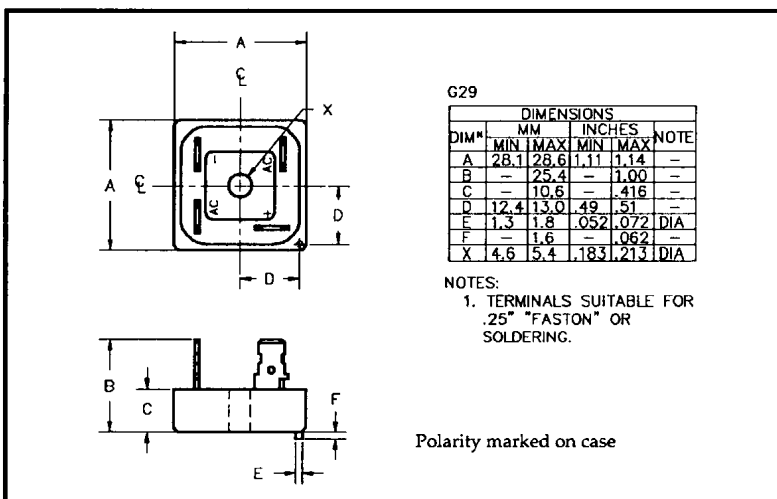
- $V_R = 50V - 400V$
- $I_F = 20.0A$
- $I_R = 2.0 \mu A$
- $t_{rr} = 150ns$

## ABSOLUTE MAXIMUM RATINGS

| Device Type | Working Reverse Voltage $V_{RWM}$ | Average Rectified Current $I_{F(AV)}$ |         |         |                         |        |         | 1 Cycle Surge Current |         |
|-------------|-----------------------------------|---------------------------------------|---------|---------|-------------------------|--------|---------|-----------------------|---------|
|             |                                   | (@ case temperature)                  |         |         | (@ ambient temperature) |        |         | $I_{FSM} t_p = 8.3mS$ |         |
|             |                                   | @ 55°C                                | @ 100°C | @ 125°C | @ 25°C                  | @ 55°C | @ 100°C | @ 25°C                | @ 100°C |
|             |                                   | Volts                                 | Amps    | Amps    | Amps                    | Amps   | Amps    | Amps                  | Amps    |
| SCBA05F     | 50                                |                                       |         |         |                         |        |         |                       |         |
| SCBA1F      | 100                               | 20                                    | 15      | 10      | 5.0                     | 4.0    | 2.5     | 150                   | 80      |
| SCBA2F      | 200                               |                                       |         |         |                         |        |         |                       |         |
| SCBA4F      | 400                               |                                       |         |         |                         |        |         |                       |         |

$R_{\theta JC} = 2.0^{\circ}C/W$

## MECHANICAL



SCBA4F is available in Europe to DEF STAN 59-61/90/207 release to F and FX levels.

January 29, 1998

## ELECTRICAL CHARACTERISTICS

| Device Type | Maximum Reverse Leakage Current $I_R$ @ $V_{RWM}$ |         | Maximum Forward Voltage $V_F$ @ 3A/leg | Reverse Recovery Time <sup>1</sup> $t_{rr}$ @ 25°C | Maximum operating & storage temp. range. $T_{OP}$ $T_{STG}$ |  |
|-------------|---|---------|--|--|---|--|
|             | @ 25°C  | @ 100°C |  |  | °C  |  |
|             | µA  | µA      | Volts                                  | nS   |   |  |
| SCBA05F     | 2.0   | 50      | 1.1                                    | 150  | -55 to +150   |  |
| SCBA1F      |   |         |  | 150  |   |  |
| SCBA2F      |   |         |  | 150  |   |  |
| SCBA4F      |   |         |  | 150  |   |  |

<sup>1</sup> Measured on discrete devices prior to assembly

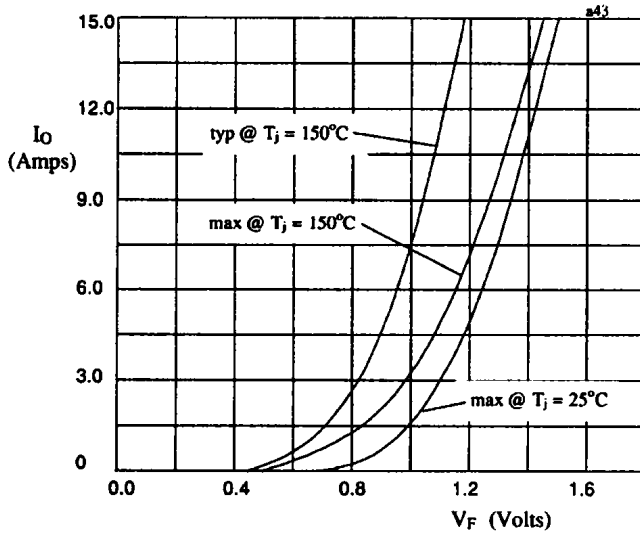


Fig 1. Forward voltage drop against output current per leg.

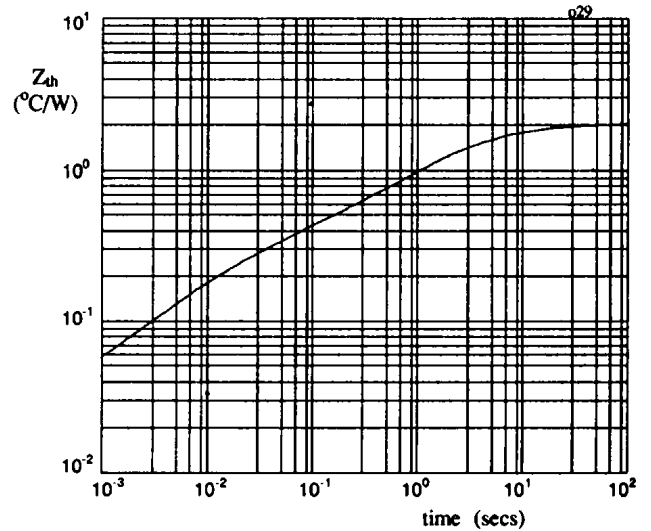


Fig 2. Transient thermal impedance characteristic per leg

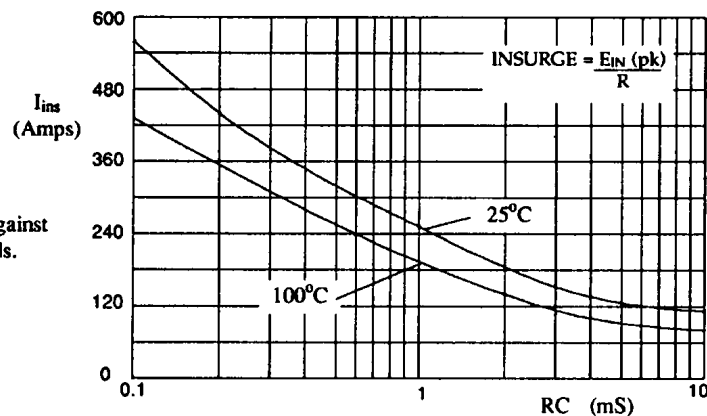


Fig 3. Maximum insurge current against time constant for capacitive loads.