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

January 29, 1998

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

HIGH CURRENT, HIGH DENSITY, FAST RECOVERY DOUBLER AND CENTER TAPS

- Very low reverse recovery time
- Low thermal impedance
- Low forward voltage drop
- High forward current applications
- High forward surge ratings

QUICK REFERENCE DATA

- V_R = 1000V
- I_F = 150A
- t_{rr} = 30nS
- I_{FSM} = 875A

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current (x0.5 for doubler output)			1 Cycle Surge Current t_p = 8.3mS	
		@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C
	Volts	Amps	Amps	Amps	Amps	Amps
SCS*FF05L SCS*FF10L SCS*FF15L	50 100 150	150	130	- 85	875	700

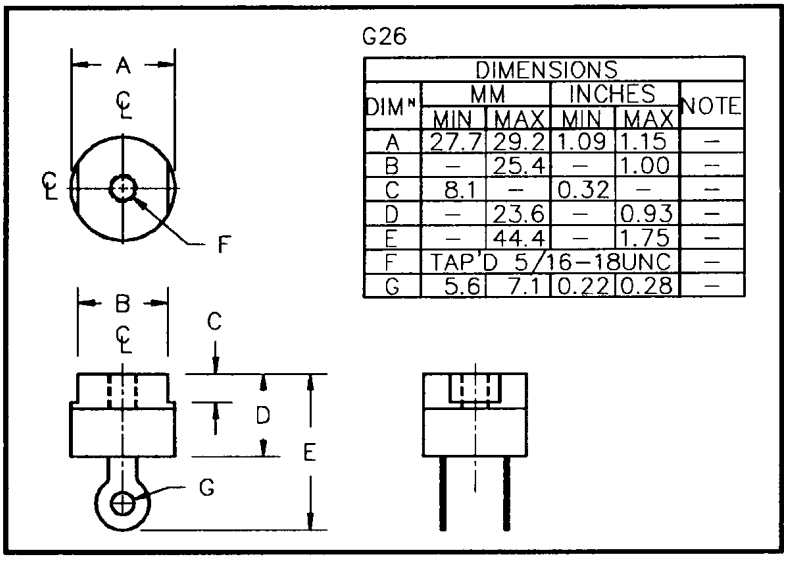
CHARACTERISTICS

Reverse Current @ V_{RWM}		Maximum Forward Voltages V_F @ 30A @ 25°C	Maximum Reverse Recovery Time t_{rr} @ 25°C
@ 25 °C	@ 100 °C		
µA	mA	Volts	nS
60	3.0	0.97	30

Add suffix for desired circuit arrangement
D = Doubler
N = Negative center tap
P = Positive center tap

Operating and Storage temperature range T_{OP} & T_{STG}	Maximum junction - case thermal impedance $R_{\theta JC}$
Volts	°C/W
-55 to +150	< 0.5

MECHANICAL



G26

DIM	DIMENSIONS MM MIN	MM MAX	INCHES MIN	INCHES MAX	NOTE
A	27.7	29.2	1.09	1.15	–
B	–	25.4	–	1.00	–
C	8.1	–	0.32	–	–
D	–	23.6	–	0.93	–
E	–	44.4	–	1.75	–
F	TAP'D 5/16–18UNC				–
G	5.6	7.1	0.22	0.28	–

January 29, 1998

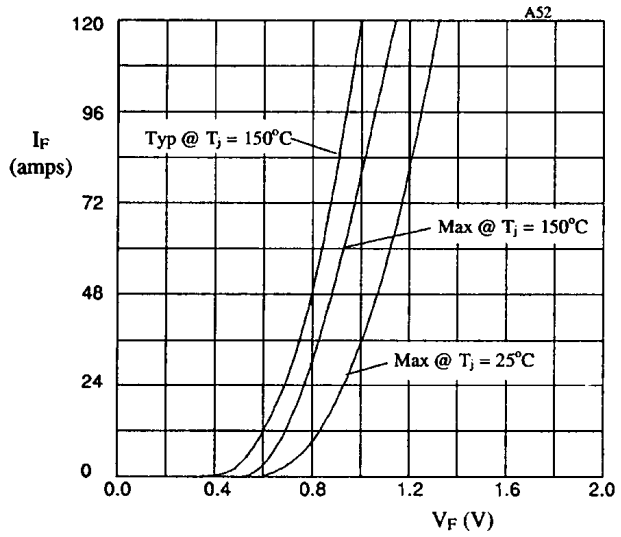


Fig 1. Maximum and typical forward voltage drop per leg as a function of forward current (T_j = 25°C & 150°C).

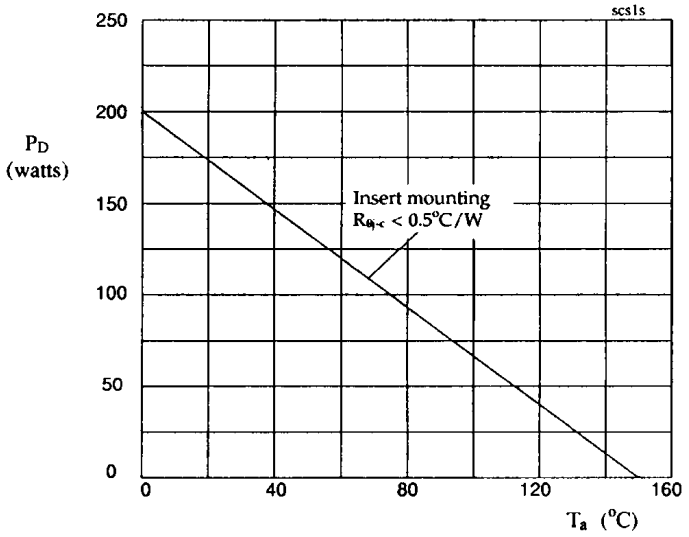


Fig 2. Power dissipation as a function of ambient temperature for different mountings.

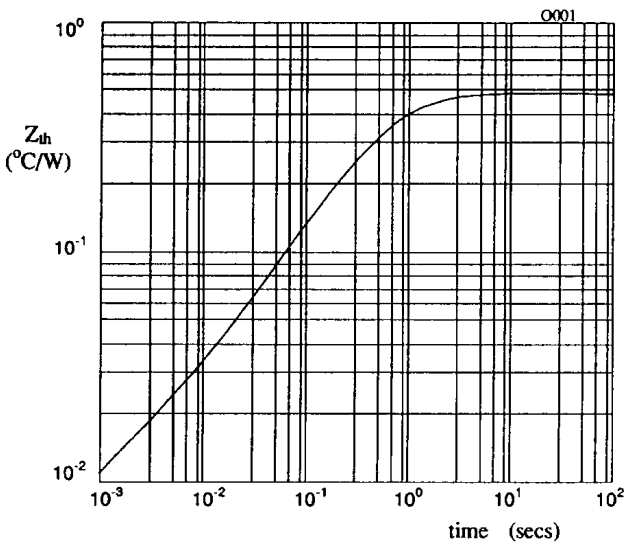


Figure 3. Transient thermal impedance characteristic when insert mounted.

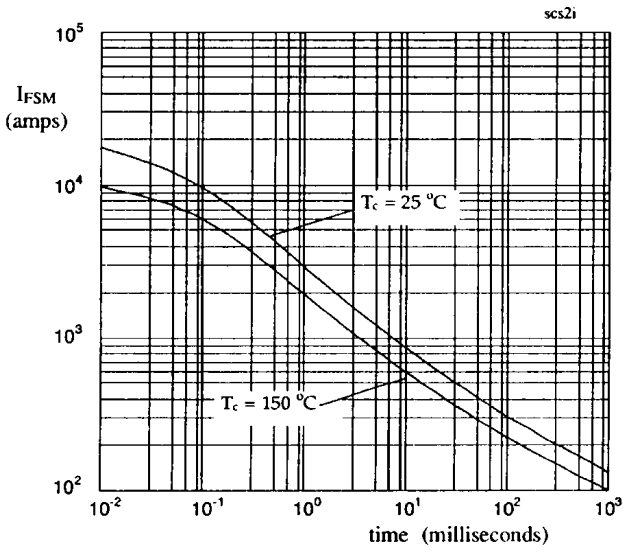


Figure 4. Maximum non-repetitive surge current against pulse width for 25°C and 150°C.