



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!



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HIGH DENSITY, HIGH VOLTAGE, STANDARD RECOVERY RECTIFIER ASSEMBLY

QUICK REFERENCE DATA

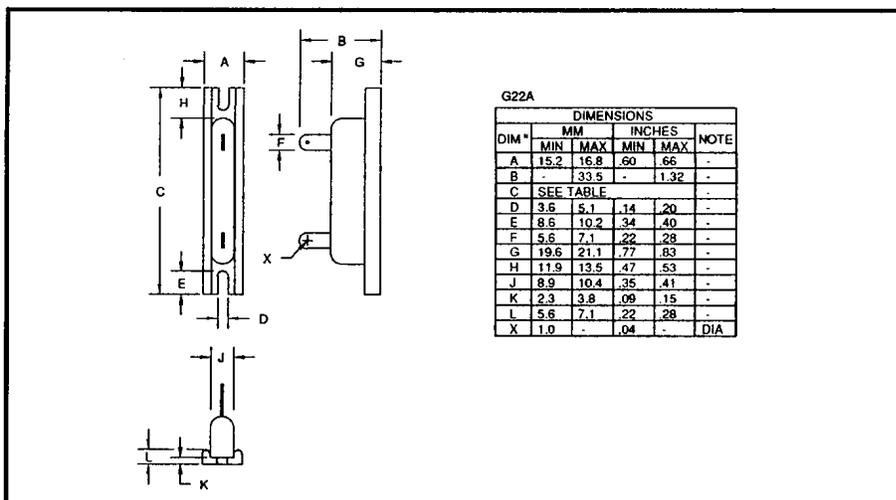
- 2.5A forward current
- Low reverse leakage current
- Corona free design
- Easy aluminum base mount
- Low forward voltage drop

- $V_R = 5kV \text{ \& } 10kV$
- $I_F = 2.5A$
- $t_{rr} = 2.0\mu S$
- $I_R = 1.0\mu A$

ABSOLUTE MAXIMUM RATINGS

	Symbol	SDH5KS	SDH10KS	Unit
Working reverse voltage	V_{RWM}	5.0	10.0	kV
Surge reverse voltage	V_{RSM}	5.5	11.0	kV
Average forward current in air @ 25°C in oil @ 55°C	$I_{F(AV)}$	← 2.5 →	← 2.5 →	A A
Non-repetitive surge current $t_p = 8.3mS, @ 25^\circ C$	I_{FSM}	← 150 →	← 150 →	A
Storage temperature range	T_{STG}	← -55 to +150 →	← -55 to +150 →	°C
Operating temperature range	T_{OP}	← -55 to +150 →	← -55 to +150 →	°C
Body length $\pm 0.030"$	dim C	3.36	4.04	inches

MECHANICAL

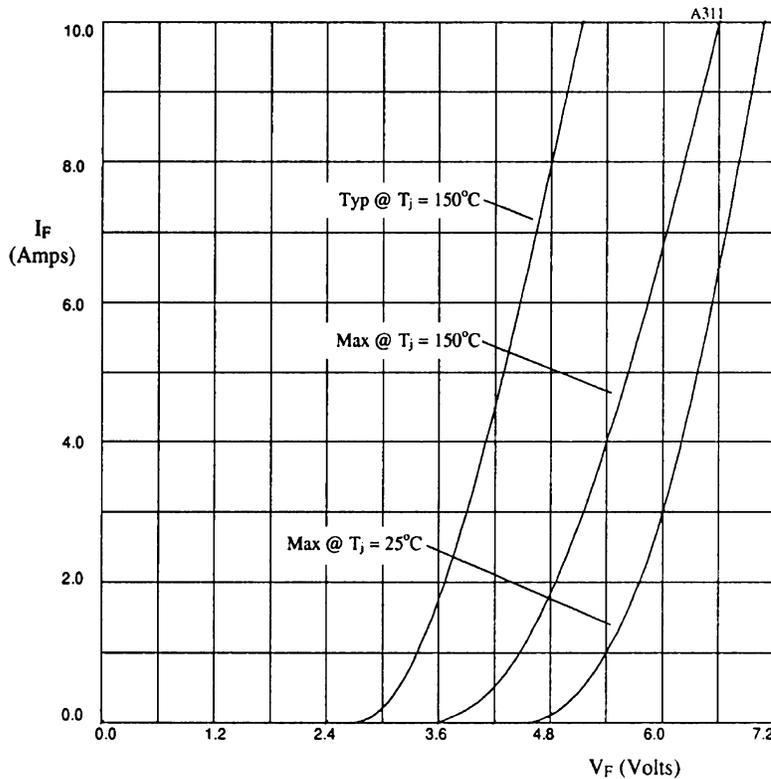


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ELECTRICAL CHARACTERISTICS

	Symbol	SDH5KS	SDH10KS	Unit
Max. forward voltage drop @ $I_F = 3.0A, T_j = 25^\circ C$	V_F	6.0	12.0	V
Max. reverse leakage current @ $V_{RWM}, T_j = 25^\circ C$	I_R	← 1.0 →	← 20 →	μA
@ $V_{RWM}, T_j = 100^\circ C$	I_R	← 20 →	← 20 →	μA
Max. reverse recovery time ¹ 0.5A I_F to 1.0A I_R . Recovers to 0.25A I_{RR} .	t_{rr}	← 2.0 →	← 2.0 →	μS
Max. fusing current $t_p = 8.3mS$	I^2t	← 94 →	← 94 →	A^2S

¹ Measured on discrete devices prior to assembly



Multiplication tables for fig 1.

SDH5KS X-axis x1
SDH10KS X-axis x2

Fig 1. Forward voltage drop as a function of forward current for use with multiplication table 1.