

**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

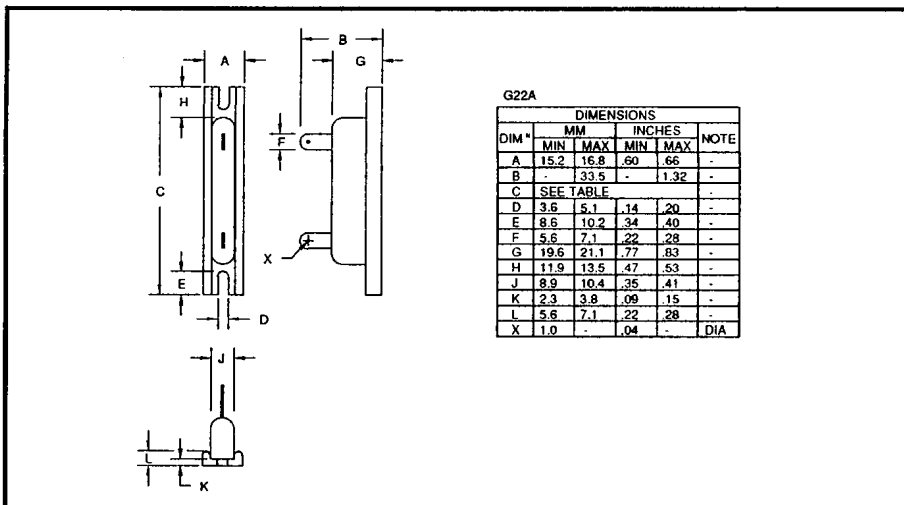
- $V_R = 5kV \text{ \& } 10kV$
- $I_F = 2.5A$
- $t_{rr} = 2.0\mu S$
- $I_R = 1.0\mu A$

**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 →		A
Storage temperature range	$T_{STG}$	← -55 to +150 →		°C
Operating temperature range	$T_{OP}$	← -55 to +150 →		°C
Body length $\pm 0.030"$	dim C	3.36	4.04	inches

6

**MECHANICAL**

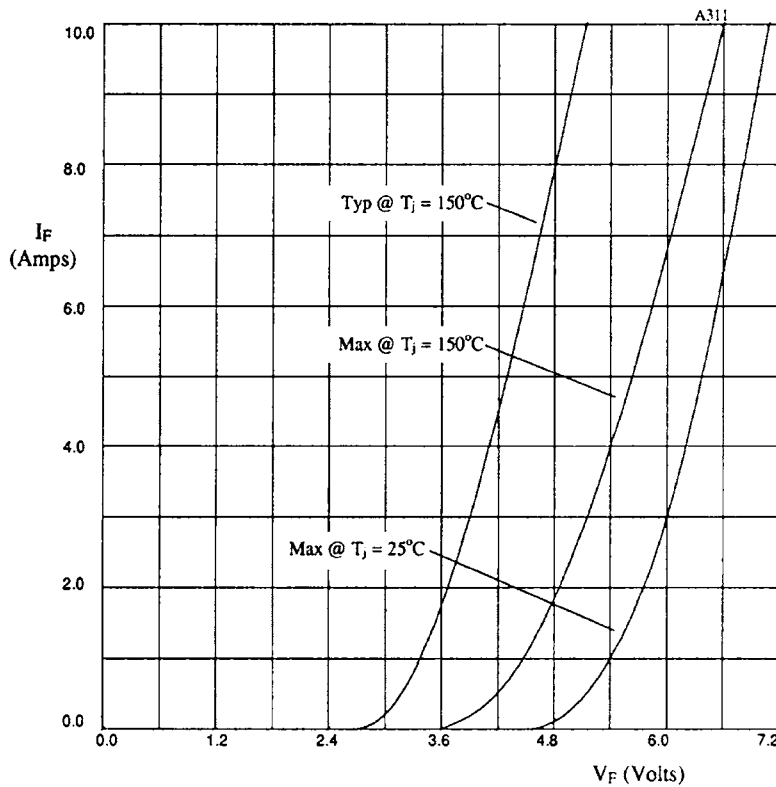


**ELECTRICAL CHARACTERISTICS**

	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 →	← 1.0 →	$\mu A$
@ $V_{RWM}, T_j = 100^\circ C$	$I_R$	← 20 →	← 20 →	$\mu A$
Max. reverse recovery time <sup>1</sup> 0.5A $I_F$ to 1.0A $I_R$ . Recovers to 0.25A $I_{RR}$ .	$t_{rr}$	← 2.0 →	← 2.0 →	$\mu S$
Max. fusing current $t_p = 8.3mS$	$I^2t$	← 94 →	← 94 →	$A^2S$

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

**6**



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.