

**HIGH DENSITY, HIGH VOLTAGE, STANDARD  
RECOVERY RECTIFIER ASSEMBLY**

**QUICK REFERENCE  
DATA**

- Low reverse leakage current
- Corona free design
- Easy aluminum base mount
- Low forward voltage drop
- Up to 15kV reverse voltage

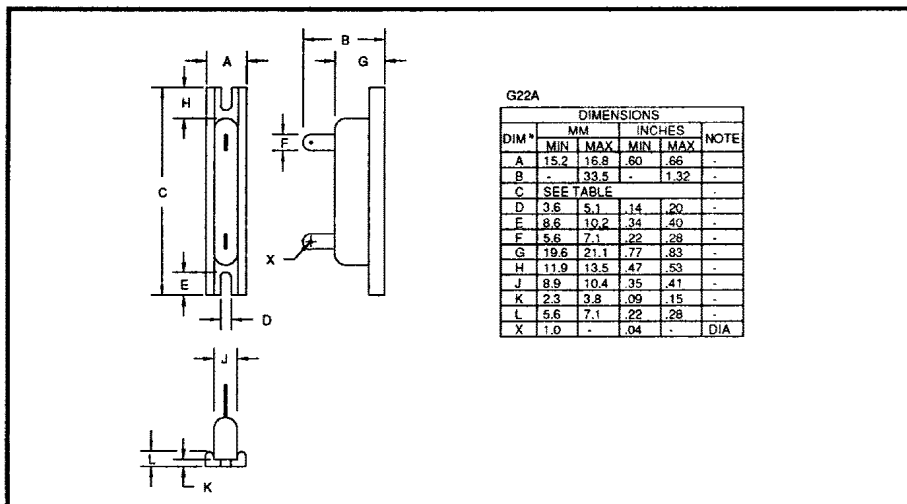
- $V_R = 7.5\text{kV} \ \& \ 15\text{kV}$
- $I_F = 400\text{mA}$
- $t_{rr} = 2.5\mu\text{s}$
- $I_R = 2.0\mu\text{A}$

**ABSOLUTE MAXIMUM RATINGS**

	Symbol	SDH7.5K	SDH15K	Unit
Working reverse voltage	$V_{RWM}$	7.5	15.0	kV
Surge reverse voltage	$V_{RSM}$	8.25	16.50	kV
Average forward current in air @ 25°C in oil @ 55°C	$I_{F(AV)}$	← 400 →	← 400 →	mA mA
Non-repetitive surge current $t_p = 8.3\text{ms}, @ 25^\circ\text{C}$	$I_{FSM}$	← 40.0 →		A
Storage temperature range	$T_{STG}$	← -55 to +150 →		°C
Operating temperature range	$T_{OP}$	← -55 to +150 →		°C
Body length ±0.030"	dim C	3.36	4.04	inches

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**MECHANICAL**

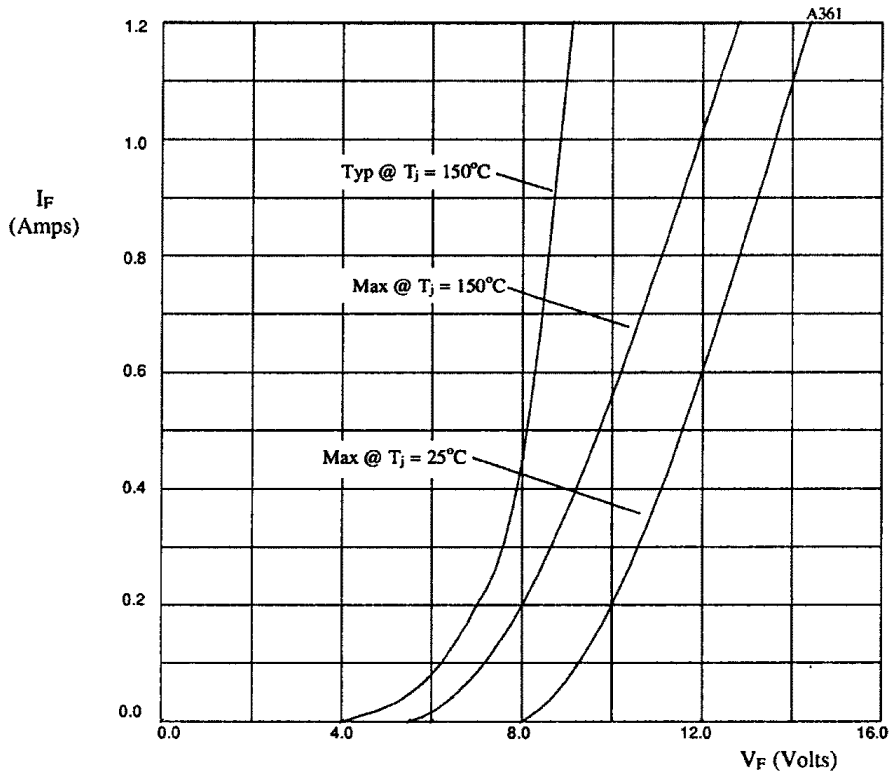


**ELECTRICAL CHARACTERISTICS**

	Symbol	SDH7.5K	SDH15K	Unit
Max. forward voltage drop @ $I_F = 200\text{mA}$ , $T_j = 25^\circ\text{C}$	$V_F$	10.0	20.0	V
Max. reverse leakage current @ $V_{RWM}$ , $T_j = 25^\circ\text{C}$	$I_R$	← 2.0 →	← →	$\mu\text{A}$
@ $V_{RWM}$ , $T_j = 100^\circ\text{C}$	$I_R$	← 40 →	← →	$\mu\text{A}$
Max. reverse recovery time <sup>1</sup> 50mA $I_F$ to 100mA $I_R$ . Recovers to 25mA $I_{RR}$ .	$t_{rr}$	← 2.5 →	← →	$\mu\text{s}$
Max. fusing current $t_p = 8.3\text{ms}$	$I^2t$	← 6.64 →	← →	$\text{A}^2\text{s}$

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

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Multiplication tables for fig 1.

SDH7.5K X-axis x1  
SDH15K X-axis x2

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