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HIGH DENSITY, HIGH VOLTAGE, STANDARD RECOVERY RECTIFIER ASSEMBLY

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

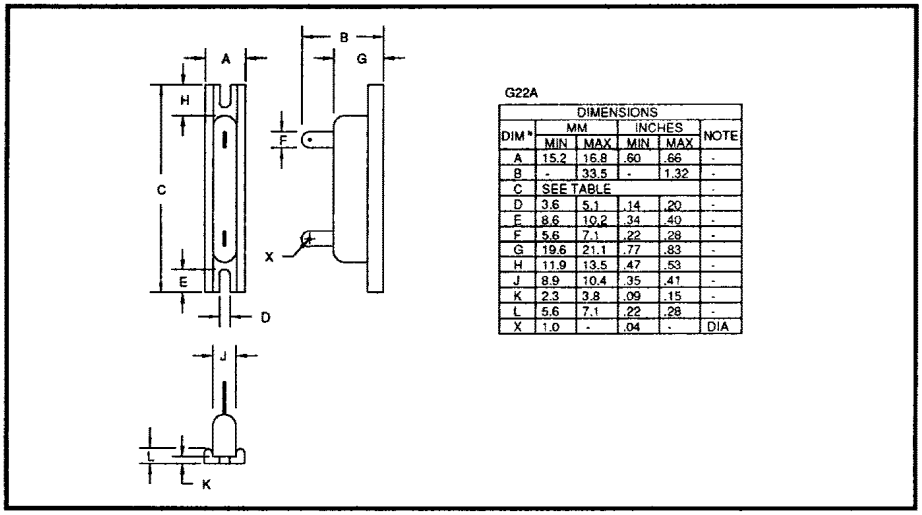
QUICK REFERENCE DATA

- V_R = 7.5kV & 15kV
- I_F = 400mA
- t_{rr} = 2.5µS
- I_R = 2.0µA

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 = 8.3mS, @ 25°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

MECHANICAL



G22A

DIM	DIMENSIONS MM MIN	MM MAX	INCHES MIN	INCHES MAX	NOTE
A	15.2	16.8	.60	.66	-
B	-	33.5	-	1.32	-
C	SEE TABLE				-
D	3.6	5.1	.14	.20	-
E	8.6	10.2	.34	.40	-
F	5.6	7.1	.22	.28	-
G	19.6	21.1	.77	.83	-
H	11.9	13.5	.47	.53	-
J	8.9	10.4	.35	.41	-
K	2.3	3.8	.09	.15	-
L	5.6	7.1	.22	.28	-
X	1.0	-	.04	-	DIA

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ELECTRICAL CHARACTERISTICS

	Symbol	SDH7.5K	SDH15K	Unit
Max. forward voltage drop @ I_F = 200mA, T_j = 25°C	V_F	10.0	20.0	V
Max. reverse leakage current @ V_{RWM}, T_j = 25°C	I_R	← 2.0 →		µA
@ V_{RWM}, T_j = 100°C	I_R	← 40 →		µA
Max. reverse recovery time [1] 50mA I_F to 100mA I_R. Recovers to 25mA I_{RR}.	t_{rr}	← 2.5 →		µS
Max. fusing current t_p = 8.3mS	I^2t	← 6.64 →		A^2S

[1] Measured on discrete devices prior to assembly

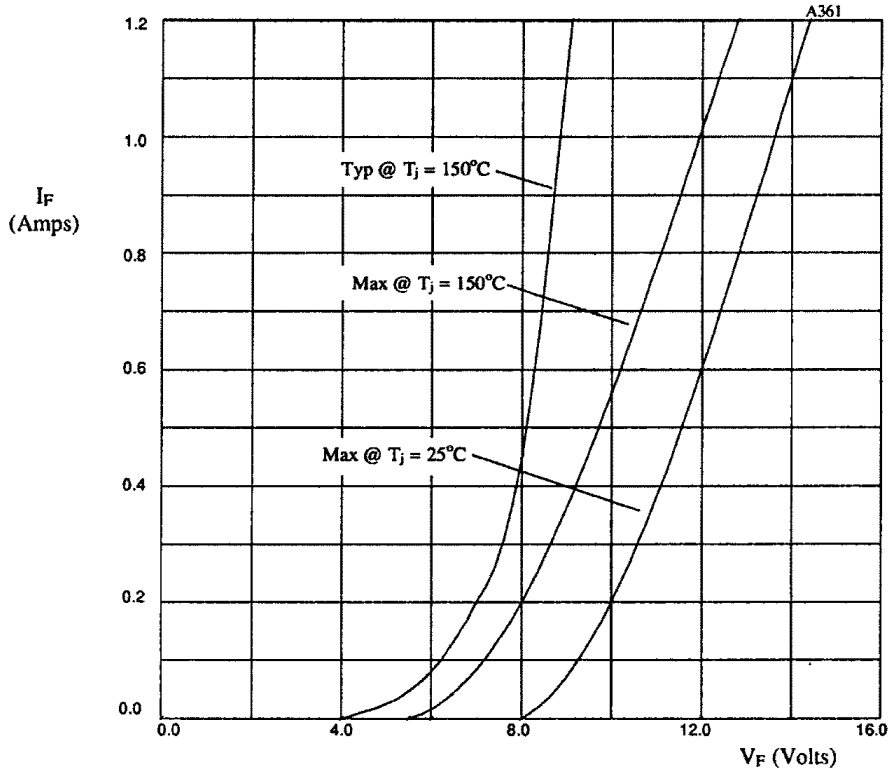

Fig 1. Forward voltage drop as a function of forward current for use with multiplication table 1.

Multiplication tables for fig 1.

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