



### HIGH DENSITY, HIGH VOLTAGE, STANDARD RECOVERY DOUBLER AND CENTER TAPS

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

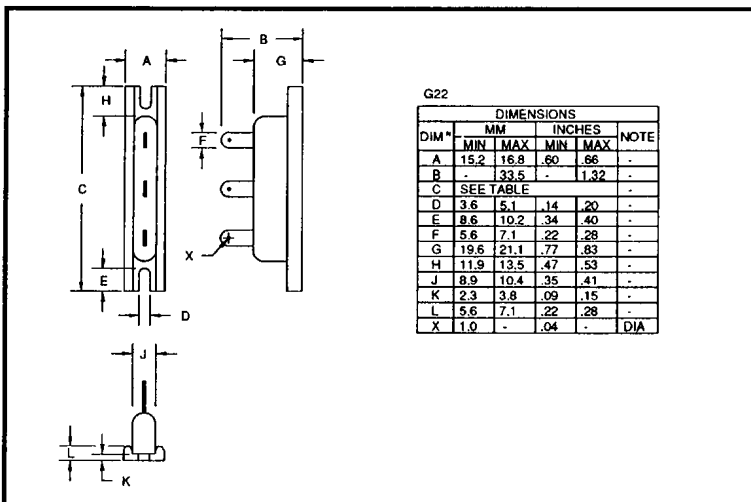
### QUICK REFERENCE DATA

- $V_R = 7.5\text{kV} \text{ \& } 15\text{kV}$
- $I_F = 800\text{mA}$
- $t_{rr} = 2.0\mu\text{s}$
- $I_R = 1.0\mu\text{A}$

### ABSOLUTE MAXIMUM RATINGS

| Device Type | Working Reverse Voltage<br>$V_{RWM}$ | Average Rectified Current |          | 1 Cycle Surge Current<br>$t_p = 8.3\text{mS}$<br>@ 25°C | Operating and storage temp. ranges.<br>$T_{OP} \text{ \& } T_{STG}$ | Case Length |
|-------------|--------------------------------------|---------------------------|----------|---------------------------------------------------------|---------------------------------------------------------------------|-------------|
|             |                                      | air 25°C                  | oil 55°C |                                                         |                                                                     | dim C       |
|             | Volts                                | Amps                      | Amps     | Amps                                                    | °C                                                                  | inches      |
| SDHD7.5K    | 7500                                 | 0.4                       | 0.4      | 16                                                      | -55 to + 150                                                        | 4.72        |
| SDHD15K     | 15000                                | 0.4                       | 0.4      | 16                                                      |                                                                     | 6.09        |
| SDHN7.5K    | 7500                                 | 0.8                       | 0.8      | 8                                                       | -55 to + 150                                                        | 4.72        |
| SDHN15K     | 15000                                | 0.8                       | 0.8      | 8                                                       |                                                                     | 6.09        |
| SDHP7.5K    | 7500                                 | 0.8                       | 0.8      | 8                                                       | -55 to + 150                                                        | 4.72        |
| SDHP15K     | 15000                                | 0.8                       | 0.8      | 8                                                       |                                                                     | 6.09        |

### MECHANICAL



**CHARACTERISTICS** (ratings apply per leg)

| Device Type | Reverse Current @ $V_{RWM}$ |          | Maximum Forward Voltage<br>$V_F$ @ 0.2A<br>@ 25°C | Maximum Reverse Recovery Time <sup>1</sup><br>@ 25°C |
|-------------|-----------------------------|----------|---------------------------------------------------|------------------------------------------------------|
|             | @ 25 °C                     | @ 100 °C |                                                   |                                                      |
|             | μA                          | μA       | Volts                                             | μS                                                   |
| SDHD7.5K    | 1.0                         | 20       | 10.0                                              | 2.0                                                  |
| SDHD15K     | 1.0                         | 20       | 20.0                                              |                                                      |
| SDHN7.5K    | 1.0                         | 20       | 10.0                                              |                                                      |
| SDHN15K     | 1.0                         | 20       | 20.0                                              |                                                      |
| SDHP7.5K    | 1.0                         | 20       | 10.0                                              |                                                      |
| SDHP15K     | 1.0                         | 20       | 20.0                                              |                                                      |

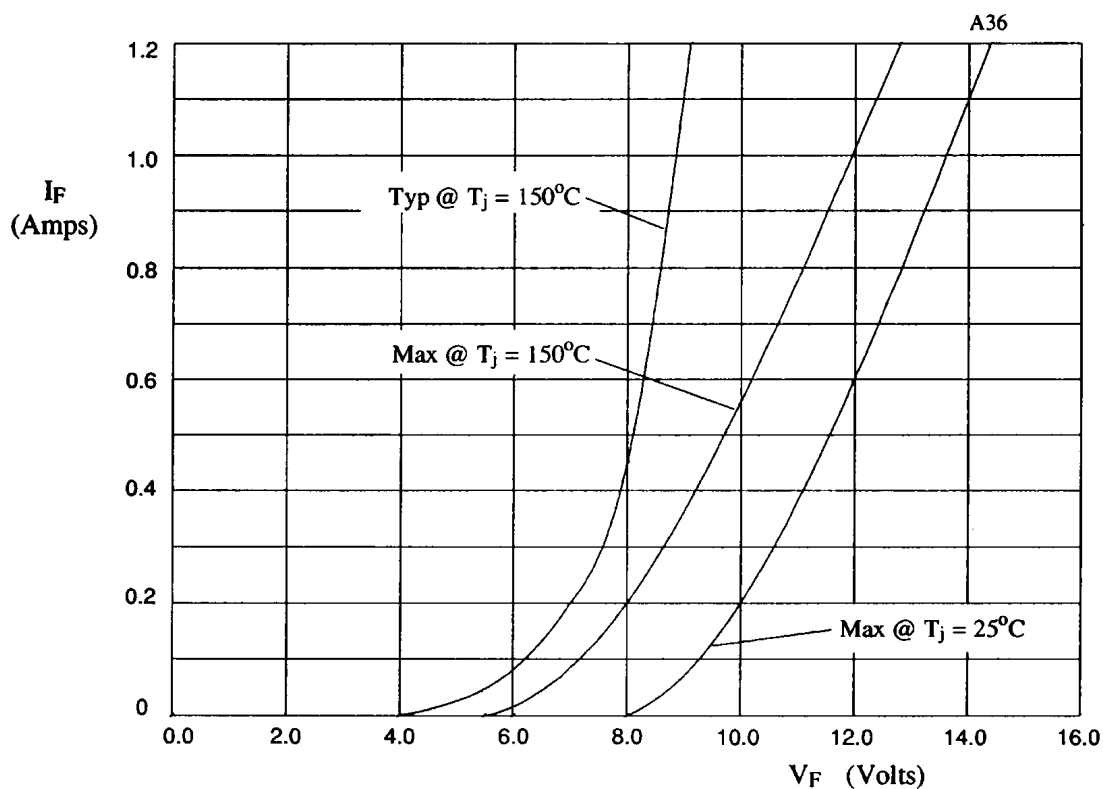
<sup>1</sup> Measured on discrete devices prior to assembly

Figure 1. Maximum and typical forward voltage drop per leg as a function of forward current ( $T_j = 25^\circ\text{C}$  &  $150^\circ\text{C}$ ) for SDH\*7.5K.

For SDH\*15K multiply X-axis by 2.

# Mouser Electronics

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