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

## 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

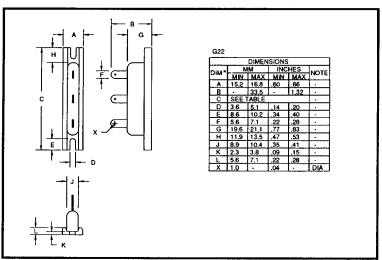
## **QUICK REFERENCE DATA**

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

#### ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage <sub>Vrwm</sub>	Average Rectified Current		1 Cycle Surge Current	Operating and storage temp. ranges.	Case Length
		air 25°C	oil 55°C	t <sub>p</sub> = 8.3mS @ 25°C	Top & TstG	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**



Device		Current RWM	Maximum Forward Voltage	Maximum Reverse Recovery Time <sup>1</sup>	
Туре	<b>@</b> 25 °C	@ 100 °C	V <sub>F</sub> @ 0.2A @ 25℃	0 25°C	
	μΑ	μΑ	Volts	μS	
SDHD7.5K	1.0	20	10.0	<b>†</b>	
SDHD15K	1.0	20	20.0		
SDHN7.5K	1.0	20	10.0	2.0	
SDHN15K	1.0	20	20.0		
SDHP7.5K	1.0	20	10.0		
SDHP15K	1.0	20	20.0		

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

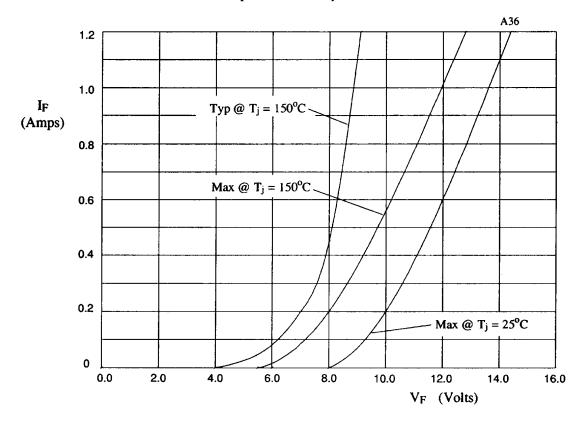


Figure 1. Maximum and typical forward voltage drop per leg as a function of forward current ( $T_j = 25^{\circ}\text{C}$  &  $150^{\circ}\text{C}$ ) for SDH\*7.5K. For SDH\*15K multiply X-axis by 2.

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## Semtech:

SDHN7.5K SDHN15K SDHP7.5K SDHD15K