

**SD820  
thru  
SD8100**

**Features**

- Low Switching Noise
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability

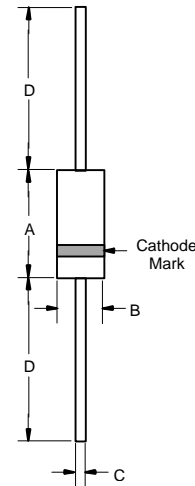
**8 Amp Schottky  
Barrier Rectifier  
20 - 100 Volts**

**Maximum Ratings**

- Operating Temperature: -65°C to +125°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

Microsemi Catalog Number	Device Marking	Maximum Reccurent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD820	SD820	20V	14V	20V
SD830	SD830	30V	21V	30V
SD840	SD840	40V	28V	40V
SD850	SD850	50V	35V	50V
SD860	SD860	60V	42V	60V
SD880	SD880	80V	56V	80V
SD8100	SD8100	100V	70V	100V

**DO-201AD**



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	8.0A	$T_A = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	175A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SD820-SD860 SD880-SD8100	$V_F$	.62V .75V	$I_{FM} = 8.0A$ ; $T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 50mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	550pF	Measured at 1.0MHz, $V_R=4.0V$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 1%

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

# SD820 thru SD8100

Figure 1  
Typical Forward Characteristics

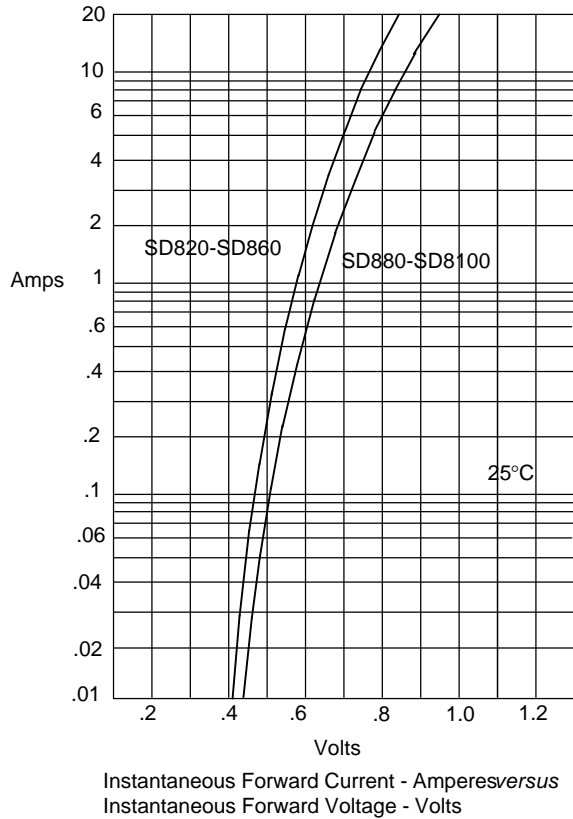
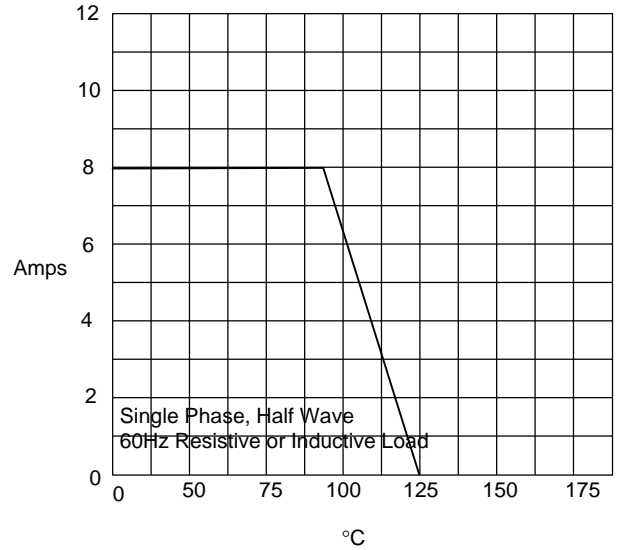
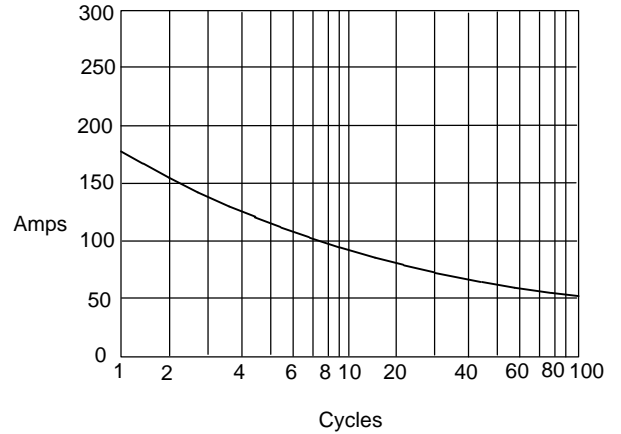


Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

Figure 3  
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles

Figure 4  
Junction Capacitance

