



Micro Commercial Components

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# MS820 THRU MS8100

## Features

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

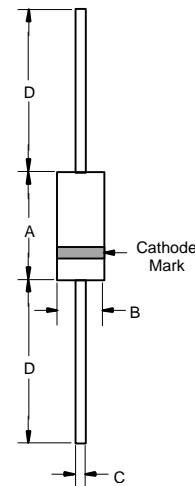
## 8 Amp Schottky Barrier Rectifier 20 to 100 Volts

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MS820	MS820	20V	14V	20V
MS830	MS830	30V	21V	30V
MS835	MS835	35V	24.5V	35V
MS840	MS840	40V	28V	40V
MS845	MS845	45V	31.5V	45V
MS860	MS860	60V	42V	60V
MS880	MS880	80V	56V	80V
MS8100	MS8100	100V	70V	100V

## DO-201AD



## Electrical Characteristics @ 25°C Unless Otherwise Specified

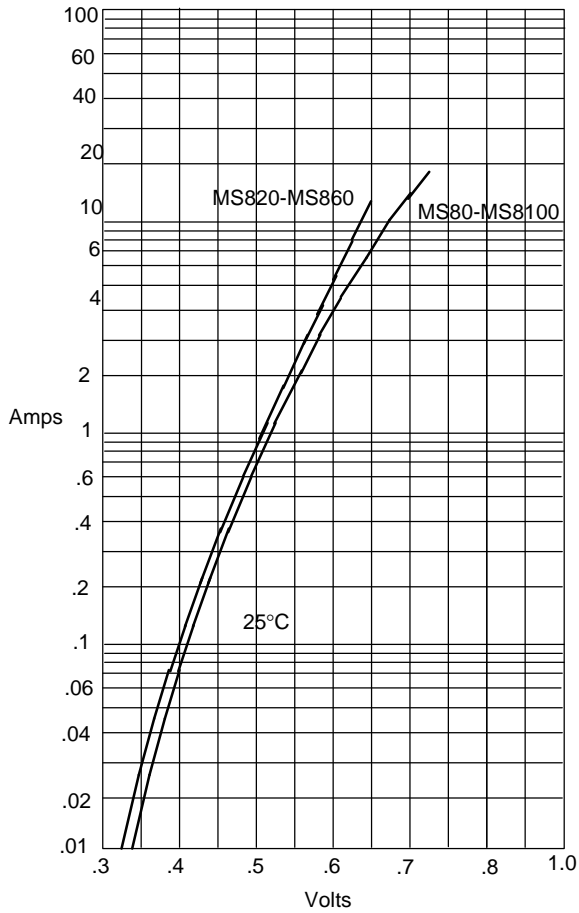
Average Forward Current	$I_{F(AV)}$	8.0A	$T_A = 120^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MS820-MS860 MS880-MS8100	$V_F$	.62V .85V	$I_{FM} = 8.0A;$ $T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0mA 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	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

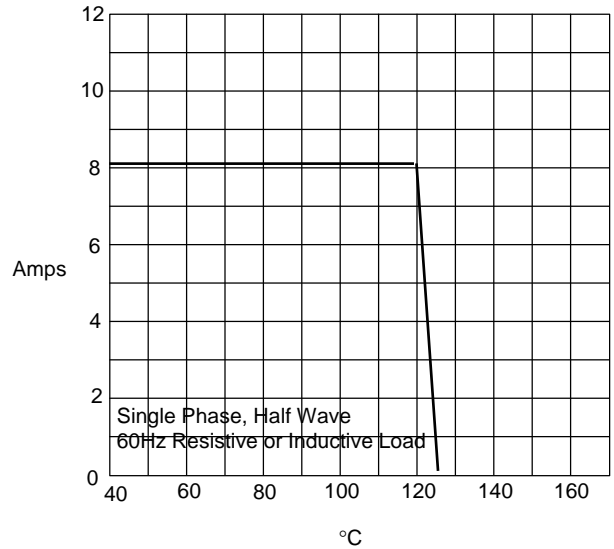
# MS820 thru MS8100

Figure 1  
Typical Forward Characteristics



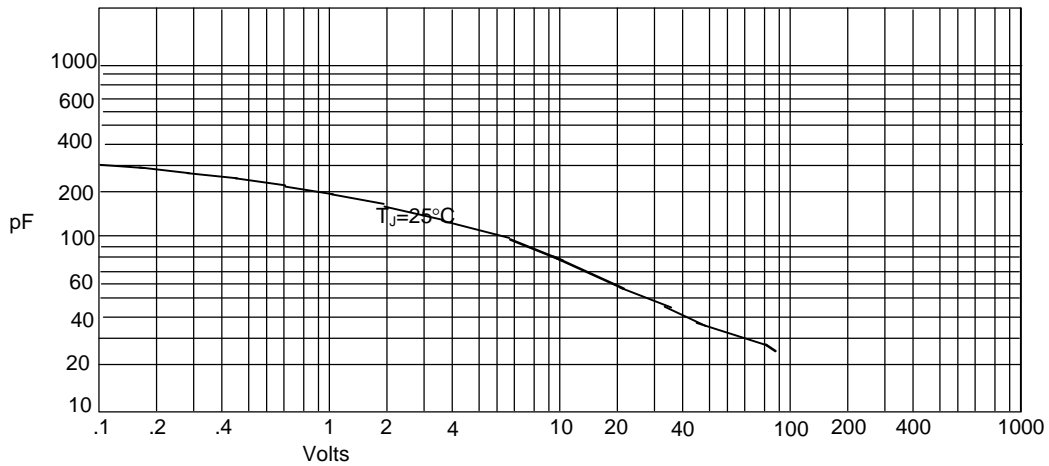
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



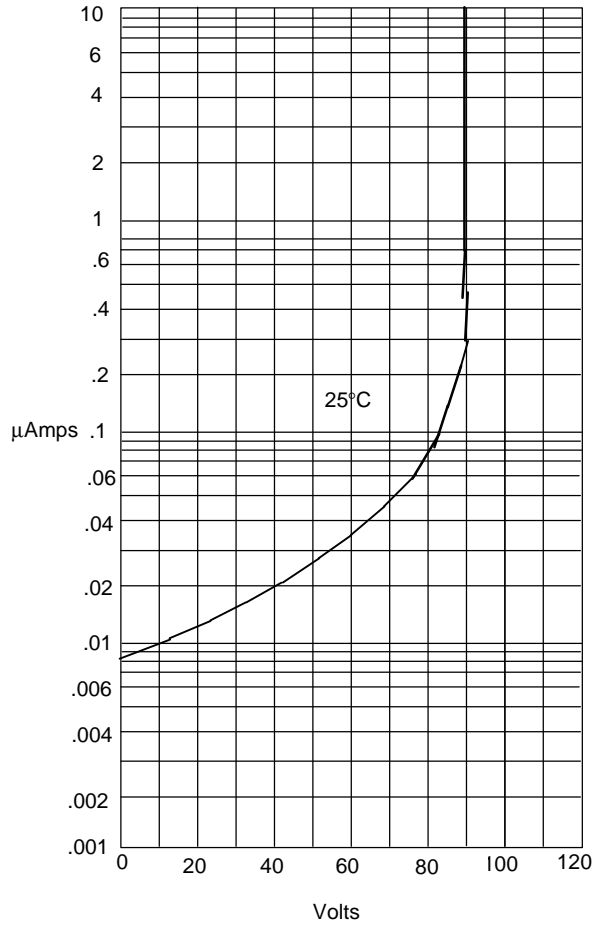
Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Junction Capacitance



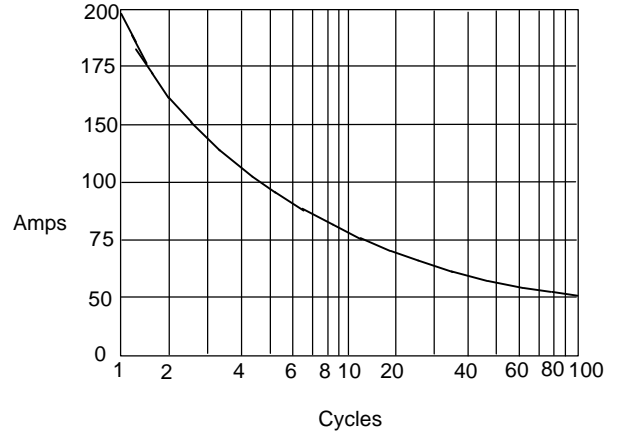
Junction Capacitance - pF versus  
Reverse Voltage - Volts

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



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