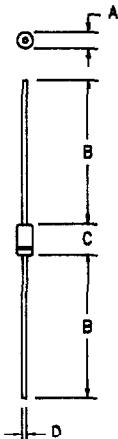


# 8 Amp Schottky Rectifier

## MSP835, MSP845

C



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.188	.280	4.78	6.50	Dia.
B	1.00	---	25.4	---	
C	.285	.375	7.24	9.52	
D	.046	.056	1.17	1.42	Dia.

PLASTIC D0201AD

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
MSP835	35V	35V
MSP845	45V	45V

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- 150°C Junction Temperature
- High Current Capability

### Electrical Characteristics

Average forward current	I F(AV) 8.0 Amps	T <sub>A</sub> = 112°C Square wave, R <sub>θJL</sub> = 9.0°C/W, L = 3/8"
Maximum surge current	I F(AV) 400 Amps	8.3 ms, half sine, T <sub>J</sub> = 150°C
Max peak forward voltage	V <sub>FM</sub> .40 Volts	FM = 8.0A:T <sub>J</sub> = 150°C *
Max peak forward voltage	V <sub>FM</sub> .52 Volts	FM = 8.0A:T <sub>J</sub> = 25°C *
Max peak reverse current	I <sub>RM</sub> 2 mA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 575 pF	V <sub>R</sub> = 5.0V, I <sub>J</sub> = 25°C

\* Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range	T <sub>STG</sub>	-40°C to 150°C
Operating junction temp range	T <sub>J</sub>	-40°C to 150°C
Maximum thermal resistance	L = 3/8" R <sub>θJL</sub>	9.0°C/W Junction to Lead
Weight		.032 ounces (1.0 grams) typical

# MSP835, MSP845

Figure 1  
Typical Forward Characteristic

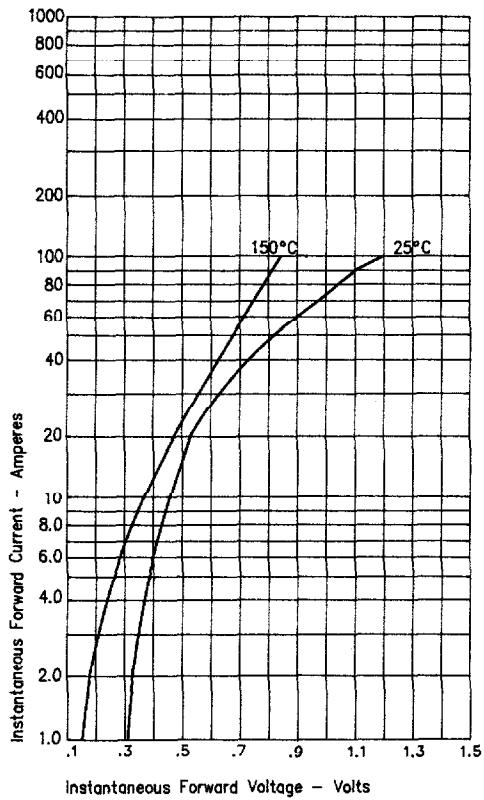


Figure 3  
Typical Junction Capacitance

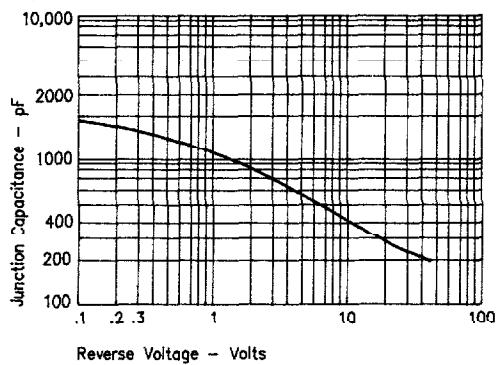


Figure 4  
Forward Current Derating

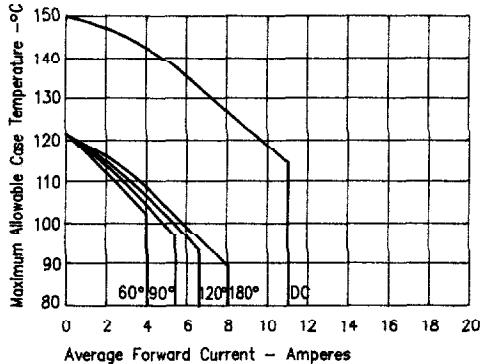


Figure 5  
Maximum Forward Power Dissipation

