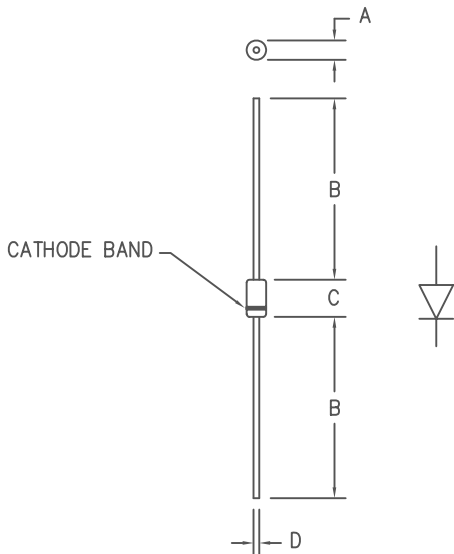


# 8 Amp Schottky Rectifier MS830 — MS845



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.188	.260	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
MS830	30V	30V
MS835	35V	35V
MS840	40V	40V
MS845	45V	45V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- High Current Capability
- $V_{RRM}$  30 to 45 Volts

Electrical Characteristics		
Average forward current	$I_F(AV)$ 8.0 Amps	$T_L = 120^\circ C$ Square wave, $R_{\theta JL} = 10.0^\circ C/W$ , $L = 3/8"$
Maximum surge current	$I_F(AV)$ 400 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	$V_{FM}$ .47 Volts	$I_{FM} = 8.0A; T_J = 150^\circ C^*$
Max peak forward voltage	$V_{FM}$ .62 Volts	$I_{FM} = 8.0A; T_J = 25^\circ C^*$
Max peak reverse current	$I_{RM}$ 250 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 660pF	$V_R = 5.0V, T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics		
Storage temperature range	$T_{STG}$	-55°C to 175°C
Operating junction temp range	$T_J$	-55°C to 175°C
Maximum thermal resistance	$L = 3/8"$ $R_{\theta JL}$	10.0°C/W Junction to lead
Weight		.032 ounces (1.0 grams) typical

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05-24-07 Rev. 3

# MS830 — MS845

Figure 1  
Typical Forward Characteristic

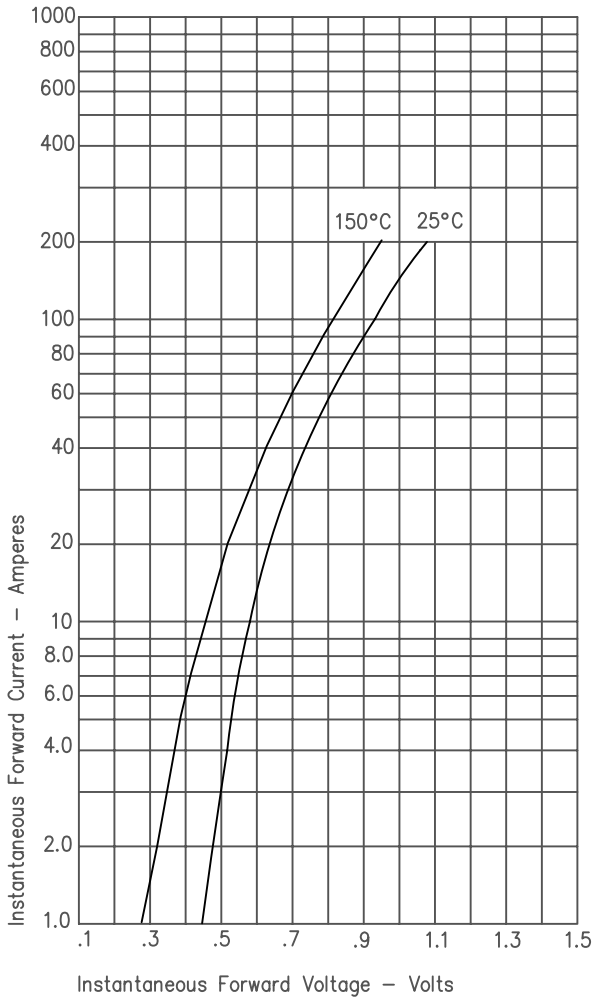


Figure 3  
Typical Junction Capacitance

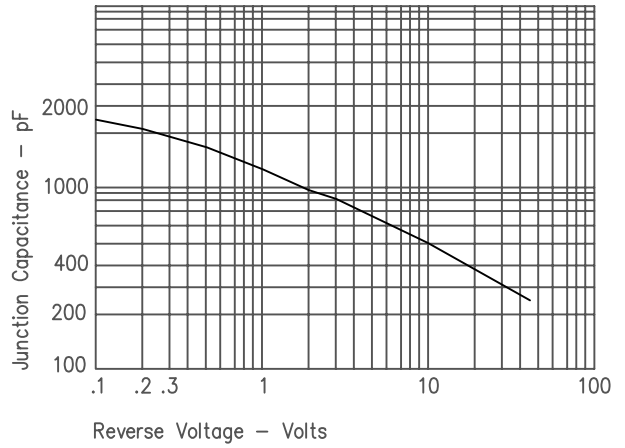


Figure 2  
Typical Reverse Characteristics

