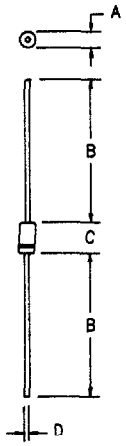
8 Amp Schottky Rectifier
MS825 – MS845



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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
MS825	25V	25V
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

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 8.0 Amps	T_A = 130°C Square wave, $R_{\theta JL}$ = 9.0°C/W, L = 3/8"
Maximum surge current	$I_{F(AV)}$ 400 Amps	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} .47 Volts	I_{FM} = 8.0A; T_J = 150°C *
Max peak forward voltage	V_{FM} .62 Volts	I_{FM} = 8.0A; T_J = 25°C *
Max peak reverse current	I_{RM} 250 µA	V_{RRM}, T_J = 25°C
Typical junction capacitance	C_J 660pF	V_R = 5.0V, T_J = 25°C

* Pulse test: Pulse width 300 µsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range		T_{STG}	-40°C to 175°C
Operating junction temp range		T_J	-40°C to 175°C
Maximum thermal resistance	L = 3/8"	$R_{\theta JL}$	9.0°C/W Junction to Lead
Weight			.032 ounces (1.0 grams) typical

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Microsemi Corp.
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MS825 – MS845

Figure 1
Typical Forward Characteristic

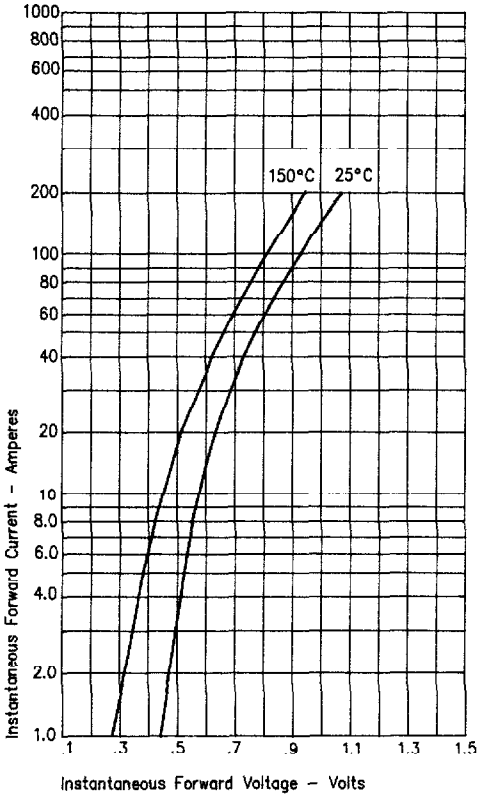

Figure 2
Typical Reverse Characteristics

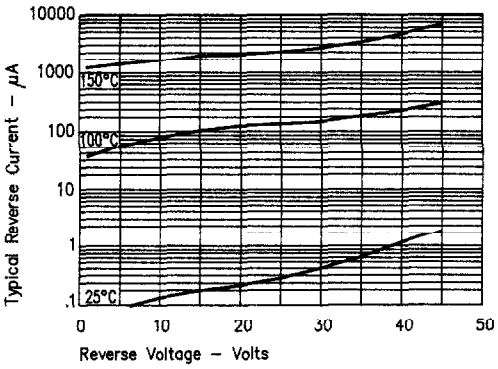

Figure 3
Typical Junction Capacitance

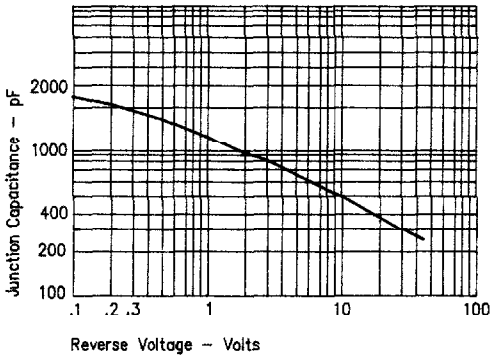

Figure 4
Forward Current Derating

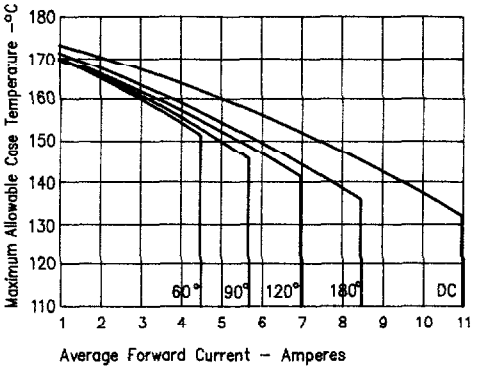

Figure 5
Maximum Forward Power Dissipation