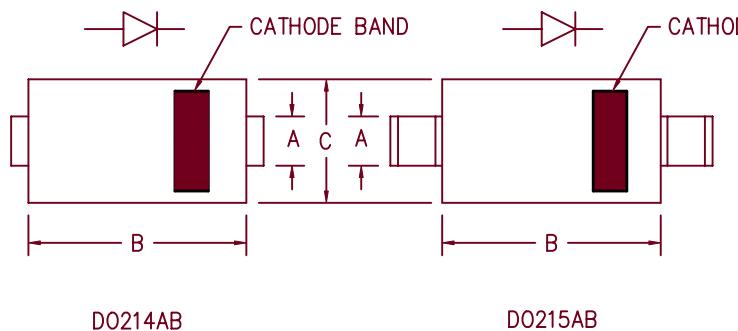
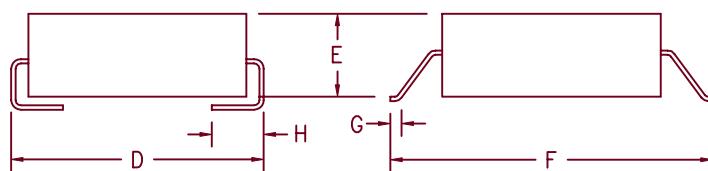


# 8 Amp Schottky Rectifier

## HSM825 - HSM845



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.117	.123	2.97	3.12	
B	.260	.280	6.60	7.11	
C	.220	.245	5.59	6.22	
D	.307	.322	7.80	8.18	
E	.075	.095	1.91	2.41	
F	.380	.400	9.65	10.16	
G	.025	.040	.640	1.02	
H	.030	.060	.760	1.52	



Microsemi  
Catalog Number

Working Peak  
Reverse Voltage

Repetitive Peak  
Reverse Voltage

HSM825*	25V	25V
HSM830*	30V	30V
HSM835*	35V	35V
HSM840*	40V	40V
HSM845*	45V	45V

\*Add Suffix J For J Lead or G For Gull Wing Lead Configuration

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- High Current Capability
- $V_{RRM}$  25 to 45 Volts
- Surface mount package

### Electrical Characteristics

Average forward current  
Maximum surge current  
Max peak forward voltage  
Max peak forward voltage  
Max peak reverse current  
Typical junction capacitance

$I_F(AV)$  8.0 Amps  
 $I_F(AV)$  350 Amps  
 $V_{FM}$  .47 Volts  
 $V_{FM}$  .62 Volts  
 $I_{RM}$  250  $\mu$ A  
 $C_J$  660pF

Square wave  
8.3ms, half sine,  $T_J = 175^\circ\text{C}$   
 $|I_{FM}| = 8.0A; T_J = 150^\circ\text{C}^*$   
 $|I_{FM}| = 8.0A; T_J = 25^\circ\text{C}^*$   
 $V_{RRM}, T_J = 25^\circ\text{C}$   
 $V_R = 5.0V, T_J = 25^\circ\text{C}$

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

### Thermal and Mechanical Characteristics

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance  
Weight

$T_{STG}$   
 $T_J$   
 $R_{\theta JL}$

-55°C to 175°C  
-55°C to 175°C  
20°C/W Junction to lead  
.008 ounces (.22 grams) typical

# HSM825 – HSM845

Figure 1  
Typical Forward Characteristic

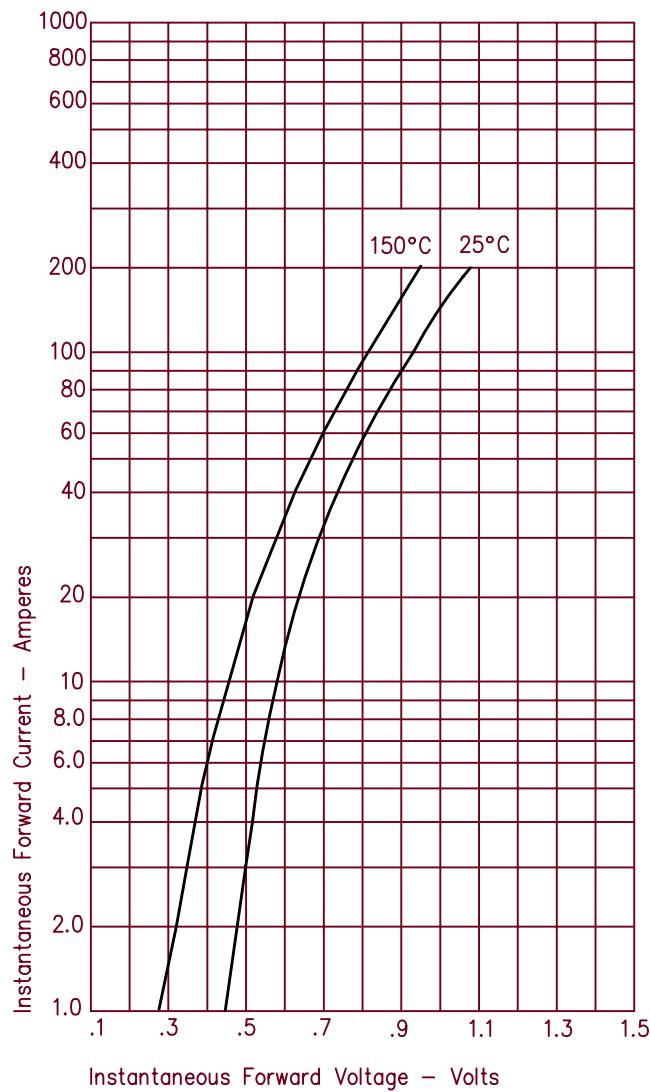


Figure 3  
Typical Junction Capacitance

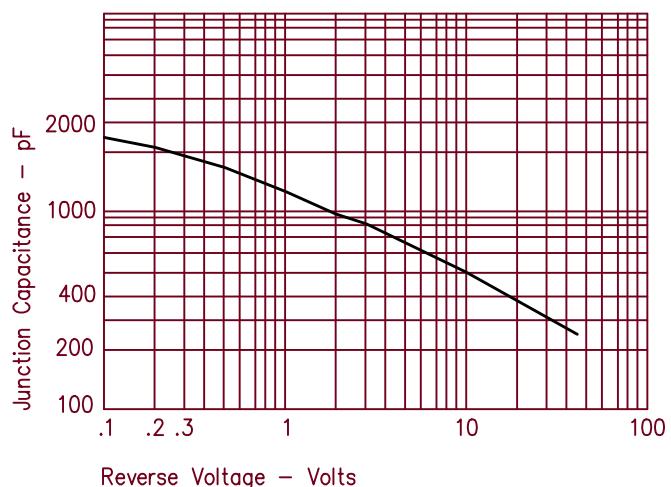


Figure 2  
Typical Reverse Characteristics

