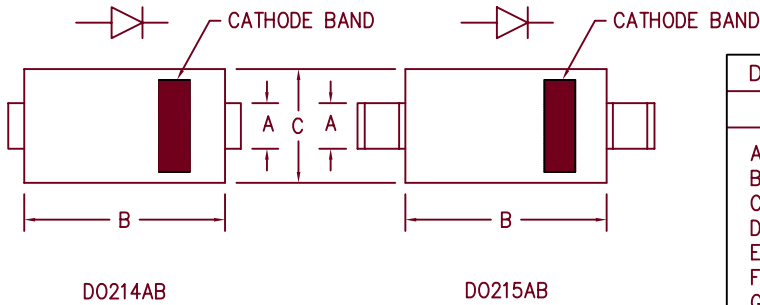




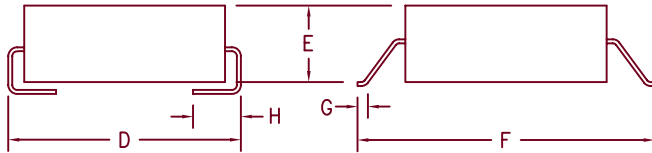
**THE DATASHEET OF  
HSM830JE3/TR13**



# 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	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
HSM825*	SK82L	25V	25V
HSM830*	SL83L	30V	30V
HSM835*	SK835L	35V	35V
HSM840*	SK84L	40V	40V
HSM845*	SK845L	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	$I_F(AV)$ 8.0 Amps	Square wave
Maximum surge current	$I_F(AV)$ 350 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	$R_{\theta JL}$	20°C/W Junction to lead
Weight		.008 ounces (.22 grams) typical



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 Scottsdale, AZ 85252  
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 FAX: (480) 947-1503  
[www.microsemi.com](http://www.microsemi.com)

05-15-07 Rev. 3

# HSM825 — HSM845

Figure 1  
Typical Forward Characteristic

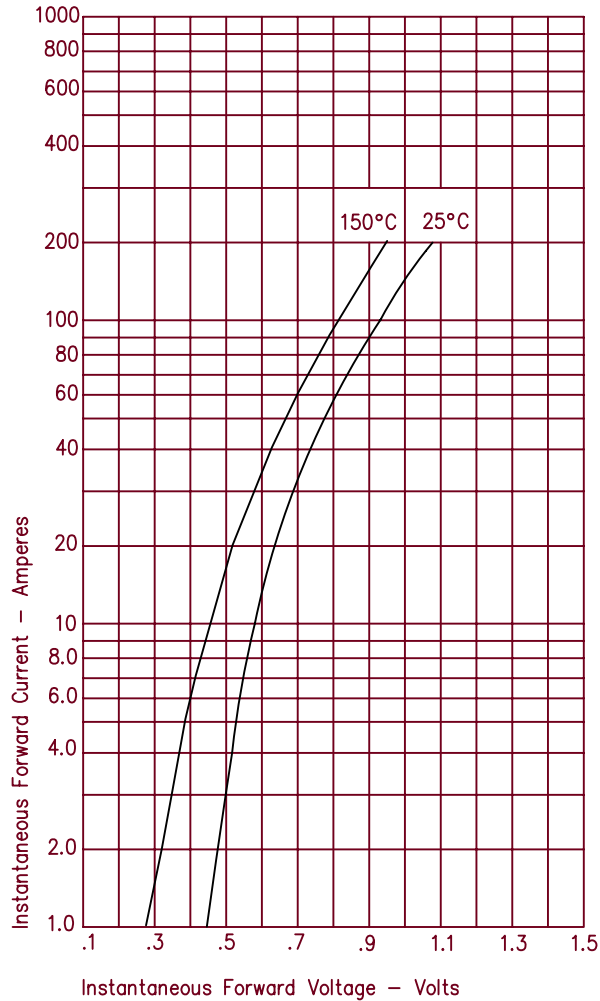


Figure 3  
Typical Junction Capacitance

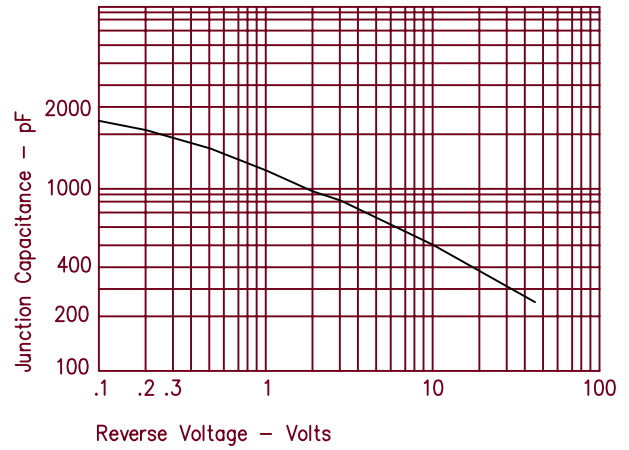
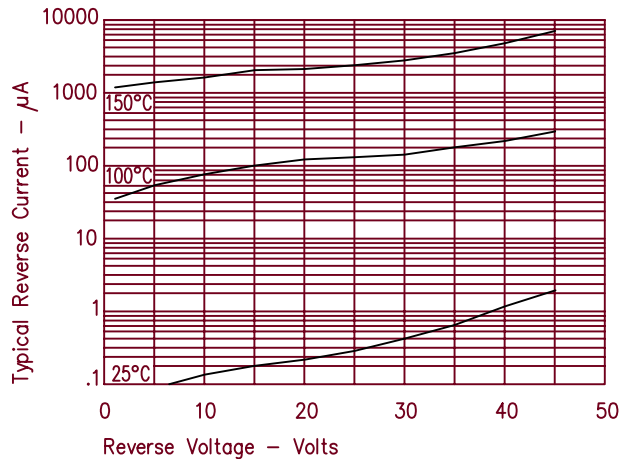




Figure 2  
Typical Reverse Characteristics



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