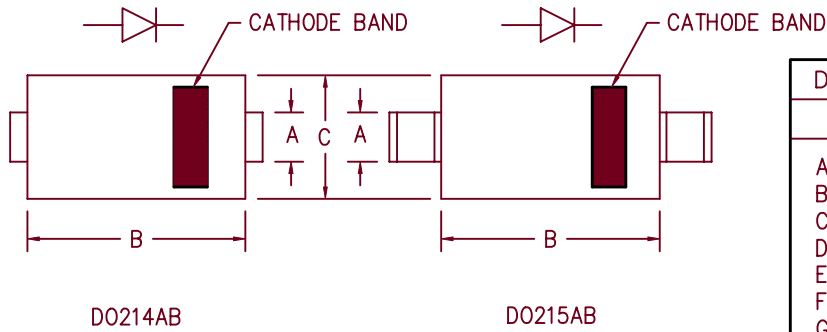
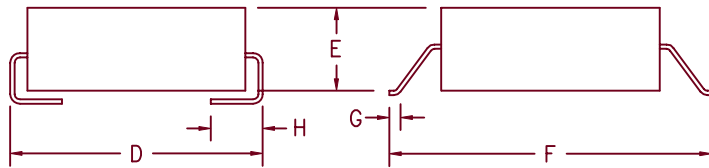


# 5 Amp Schottky Rectifier HSM580 — HSM5100



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
HSM580*	80V	80V
HSM590*	90V	90V
HSM5100*	100V	100V

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

- Schottky Barrier Rectifier
- Guard Ring Protection
- High surge capacity
- $V_{RRM}$  80 to 100 volts
- Surface mount packages

## Electrical Characteristics

Average forward current	$I_F(AV)$ 5.0 Amps	Square wave
Maximum surge current	$I_{FSM}$ 200 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	$V_{FM}$ .60 Volts	$I_{FM} = 5A; T_J = 25^\circ C^*$
Max peak forward voltage	$V_{FM}$ .80 Volts	$I_{FM} = 5A; T_J = 25^\circ C^*$
Max peak reverse current	$I_{RM}$ 250 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 280 pF	$V_R = 5.0V, T_J = 25^\circ C$

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

## Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	$-55^\circ C$ to $175^\circ C$
Operating junction temp range	$T_J$	$-55^\circ C$ to $175^\circ C$
Maximum thermal resistance	$R_{\theta JL}$	22 $^\circ C/W$ Junction to case
Weight		.008 ounces (.22 grams) typical

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# HSM580 – HSM5100

Figure 1  
Typical Forward Characteristics

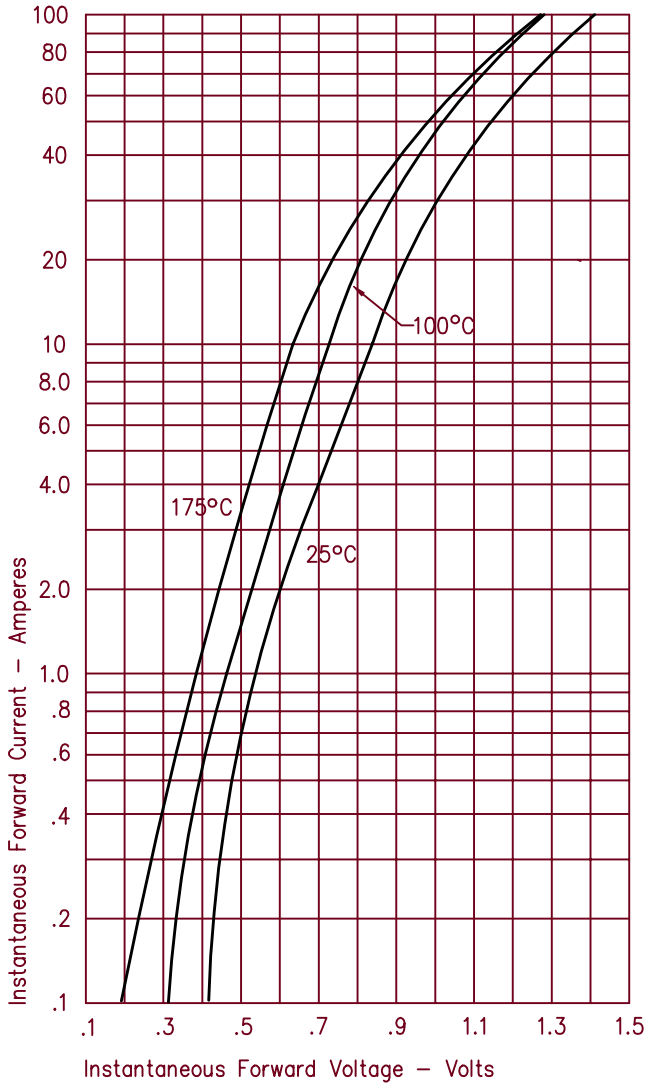


Figure 3  
Typical Junction Capacitance

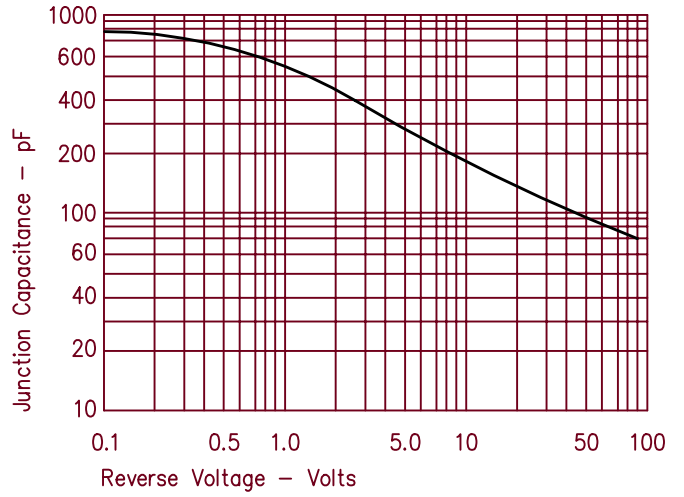


Figure 2  
Typical Reverse Characteristics

