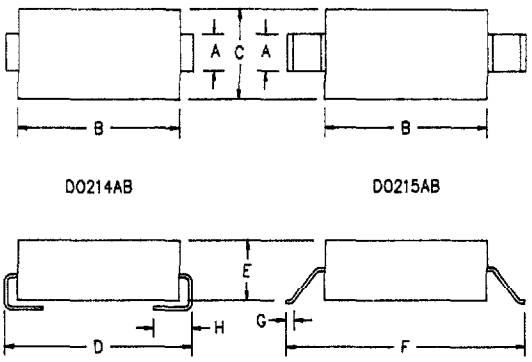
5 Amp Schottky Rectifier
HSM580, HSM590

C



DO214AB DO215AB

Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.117	.123	2.21	2.97	
B	.260	.280	4.57	6.60	
C	.220	.245	3.94	5.58	
D	.307	.322	5.59	7.80	
E	.075	.095	1.90	2.41	
F	.380	.400	6.86	7.37	
G	.025	.040	.381	.762	
H	.030	.060	.760	1.52	

Microsemi Catalog Number	*Working* Peak Reverse Voltage	*Repetitive* Peak Reverse Voltage
HSM580*	80V	80V
HSM590*	90V	90V

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

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low power loss, high efficiency
- High surge capacity
- V_{RRM} 80 to 90 Volts

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 5.0 Amps	Square wave
Maximum surge current	I_{FSM} 300 Amps	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} .60 Volts	I_{FM} = 5A; T_J = 175°C*
Max peak forward voltage	V_{FM} .80 Volts	I_{FM} = 5A; T_J = 25°C*
Max peak reverse current	I_{RM} 250 µA	V_{RRM}, T_J = 25°C
Typical junction capacitance	C_J 280 pF	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 150°C
Operating junction temp range	T_J	-40°C to 150°C
Weight		.008 ounces (.22 grams) typical

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Microsemi Corp.
Colorado

HSM580, HSM590

Figure 1
Typical Forward Characteristics

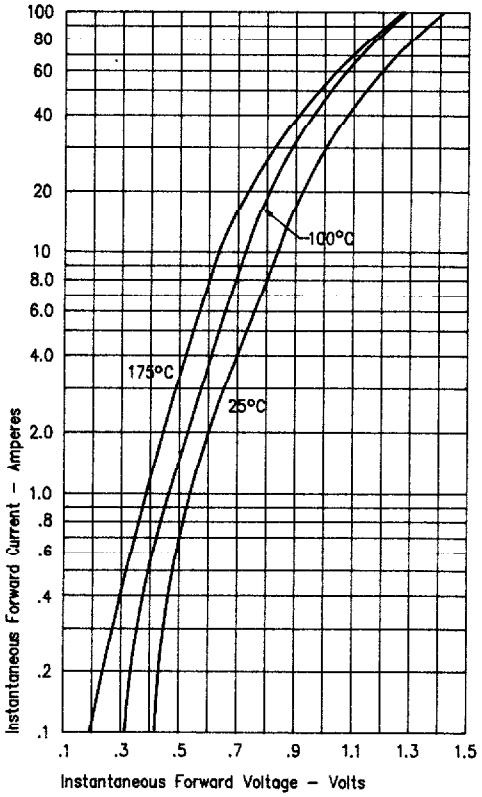

Figure 2
Typical Reverse Characteristics

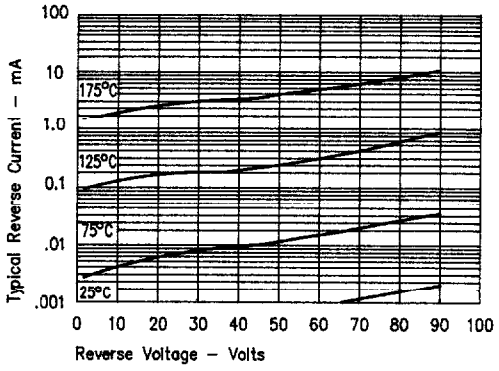

Figure 3
Typical Junction Capacitance