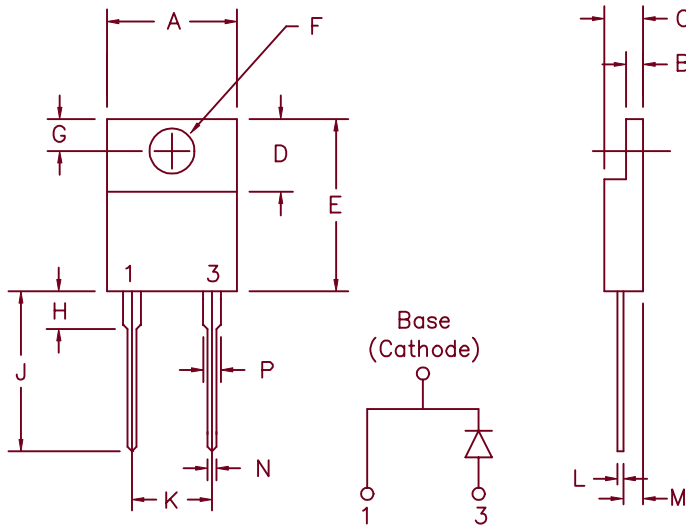


10 Amp Schottky Rectifier MS1045



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.390	.415	9.91	10.54	
B	.045	.055	1.14	1.40	
C	.180	.190	4.57	4.83	
D	.245	.260	6.22	6.60	
E	.550	.650	13.97	16.51	
F	.139	.155	3.53	3.94	Dia.
G	.100	.120	2.54	3.05	
H	---	.250	---	6.35	
J	.500	.580	12.70	14.73	
K	.190	.210	4.83	5.33	
L	.014	.025	0.35	0.63	
M	.080	.115	2.03	2.92	
N	.028	.038	0.71	0.96	
P	.045	.055	1.14	1.40	

Similar to TO-220AC

Microsemi
Catalog Number

MS1045

Working Peak
Reverse Voltage

45V

Repetitive Peak
Reverse Voltage

45V

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- 150°C Junction Temperature
- Reverse Energy Tested

Electrical Characteristics

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

$I_F(AV)$ 10 Amps
 $I_F(AV)$ 225 Amps
 V_{FM} .47 Volts
 V_{FM} .56 Volts
 I_{RM} 2 mA
 C_J 575 pF

$T_C = 106^\circ\text{C}$ Square wave, $R_{\theta JC} = 2.5^\circ\text{C/W}$
8.3 ms, half sine, $T_J = 150^\circ\text{C}$
 $I_{FM} = 10A$: $T_J = 150^\circ\text{C}^*$
 $I_{FM} = 10A$: $T_J = 25^\circ\text{C}^*$
 V_{RRM} , $T_J = 25^\circ\text{C}$
 $V_R = 5.0V$, $T_J = 25^\circ\text{C}$

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

Thermal and Mechanical Characteristics

Storage temperature range
Operating junction temp range
Maximum thermal resistance
Mounting torque
Weight

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

-55°C to 175°C
 -55°C to 150°C
 2.5°C/W Junction to Case
8-12 inch pounds (6-32 screw)
.08 ounces (2.3 grams) typical

MS1045

Figure 1
Typical Forward Characteristic

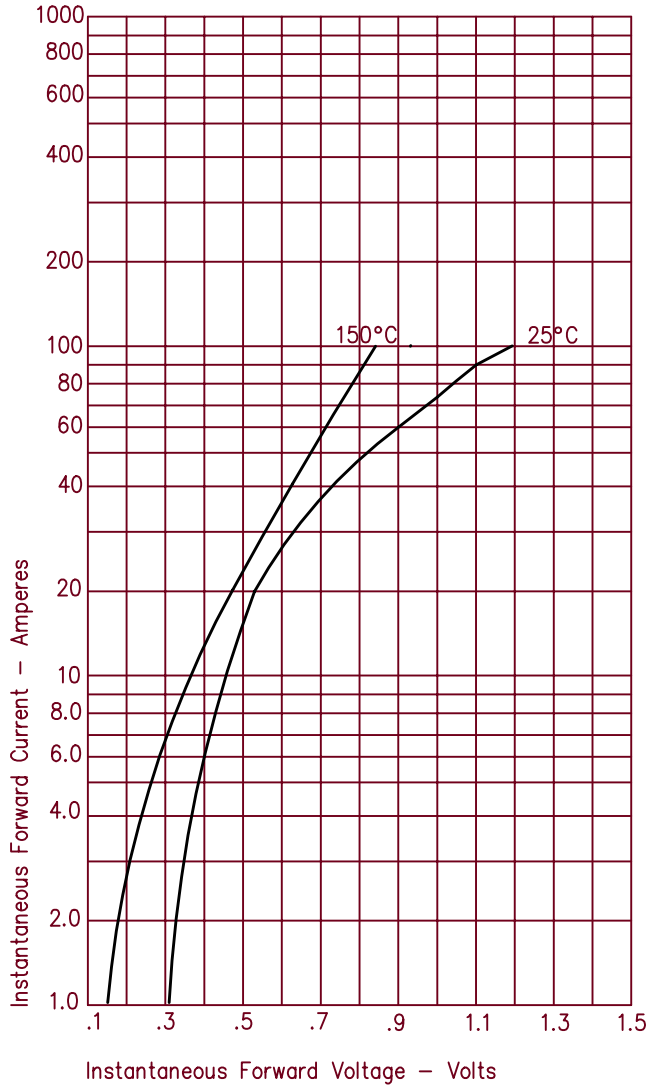


Figure 3
Typical Junction Capacitance

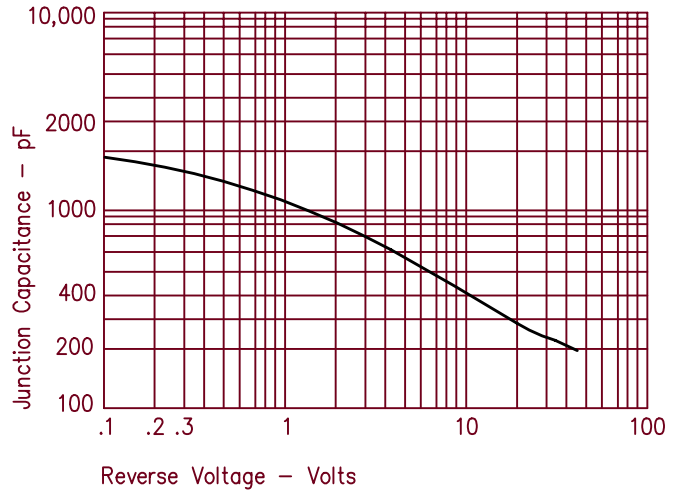


Figure 4
Forward Current Derating

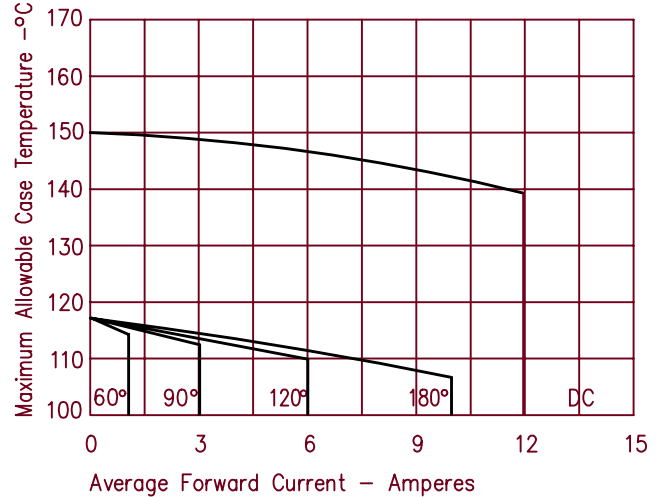


Figure 2
Typical Reverse Characteristics

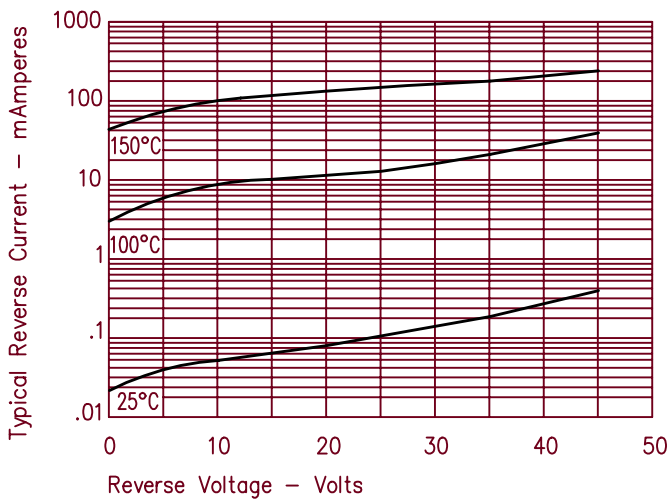


Figure 5
Maximum Forward Power Dissipation

