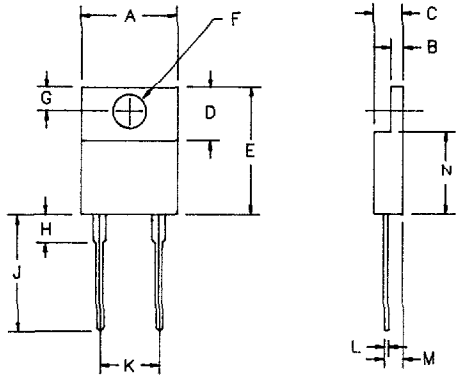


10 Amp Schottky Rectifier MS1045



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.390	.415	9.90	10.5	
B	.050	.055	1.27	1.40	
C	.180	.185	4.57	4.70	
D	.248	.260	6.30	6.60	
E	.590	.605	14.98	15.40	
F	.145	.150	3.68	3.81	Dia.
G	.108	.120	2.74	3.05	
H	.163	.170	4.14	4.32	
J	.540	.570	13.72	14.5	
K	.200	.205	5.08	5.21	
L	.021	.025	.533	.635	
M	.125	.140	3.18	3.56	
N	.335	.342	8.50	8.69	

PLASTIC T0220A

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	<ul style="list-style-type: none"> • Schottky Barrier Rectifier • Guard Ring Protection • Low Forward Voltage • 150°C Junction Temperature • High Current Capability • Reverse Energy Tested
MS1045	45V	45V	

Electrical Characteristics		
Average forward current	I _{F(AV)} 10 Amps	T _C = 106°C Square wave, R _{θJC} = 2.5°C/W
Maximum surge current	I _{F(AV)} 400 Amps	8.3 ms, half sine, T _J = 150°C
Max peak forward voltage	V _{FM} .47 Volts	I _{FM} = 10A; T _J = 150°C*
Max peak forward voltage	V _{FM} .56 Volts	I _{FM} = 10A; T _J = 25°C*
Max peak reverse current	I _{RM} 2 mA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 575 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
Maximum thermal resistance	R _{θJC}	2.5°C/W Junction to Case
Typical thermal resistance	R _{θJC}	2.0°C/W Junction to Case
Weight		.08 ounces (2.3 grams) typical

Microsemi Corp.
Colorado

MS1045



Figure 1
Typical Forward Characteristic

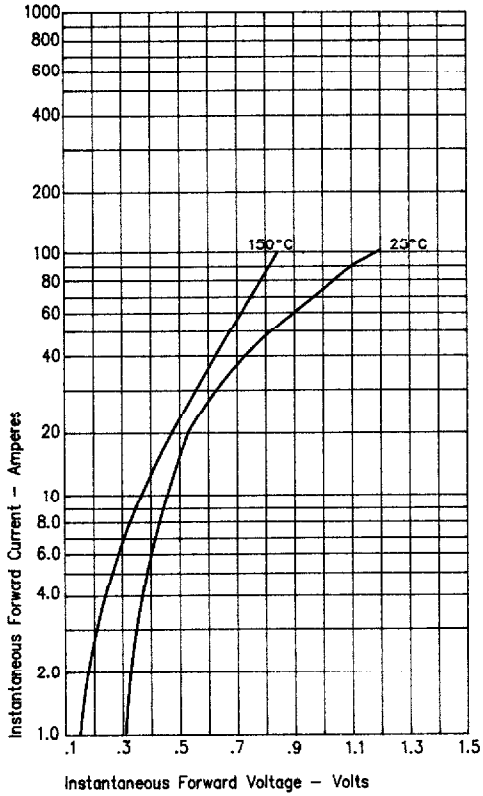


Figure 3
Typical Junction Capacitance

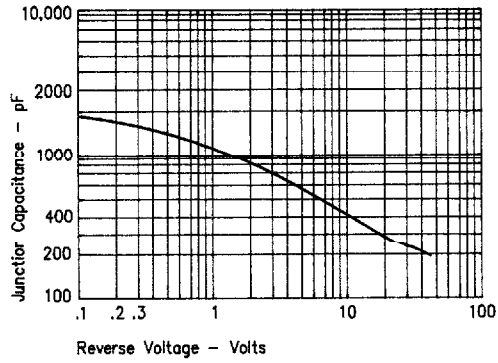


Figure 4
Forward Current Derating

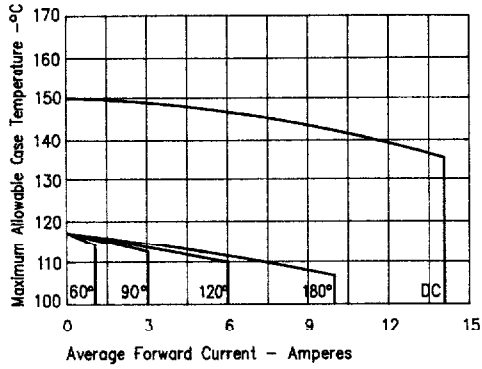


Figure 2
Typical Reverse Characteristics

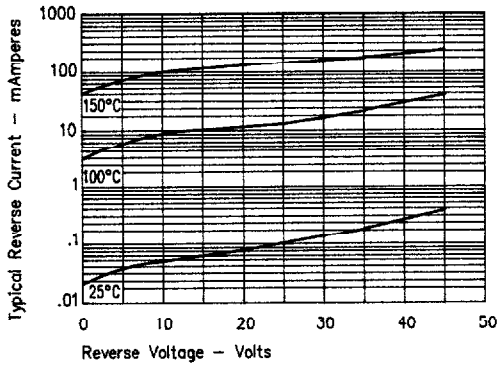


Figure 5
Maximum Forward Power Dissipation

