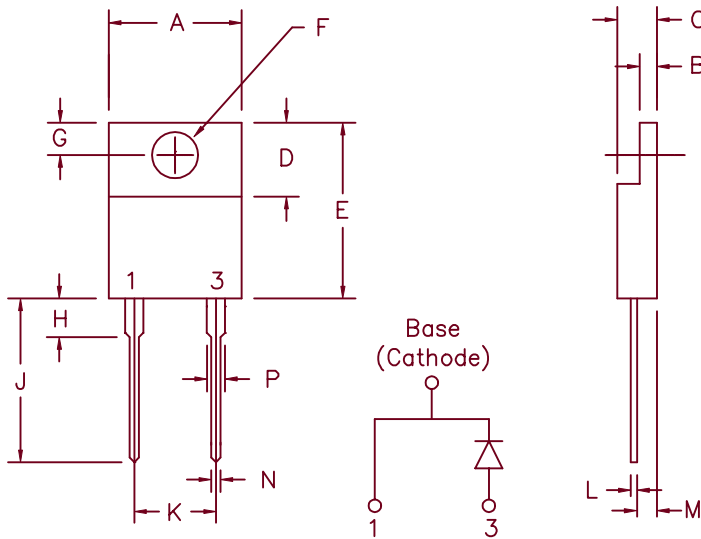


16 Amp Schottky Barrier Rectifiers MS1635 — MS1645



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	Repetitive Peak Reverse Voltage	Transient Peak Reverse Voltage	<ul style="list-style-type: none"> • Schottky barrier rectifier • Guard ring reverse protection • Low power loss, high efficiency • VRRM 35 to 45 Volts • Reverse energy tested
MS1635	35V	35V	
MS1645	45V	45V	

Electrical Characteristics

Average Forward Current
Maximum Surge Current
Max. Peak Forward Voltage
Max. Peak Forward Voltage
Max. Peak Reverse Current
Max. Peak Reverse Current
Typical Junction Capacitance

$I_F(AV)$ 16 Amps
 I_{FSM} 300 Amps
 V_{FM} .56 Volts
 V_{FM} .67 Volts
 I_{RM} 10 mA
 I_{RM} 250 μ A
 C_J 850 pF

$T_C = 153^\circ\text{C}$, Square wave, $R_{\theta JC} = 2.0^\circ\text{C/W}$
8.3ms, half sine, $T_J = 175^\circ\text{C}$
 $I_{FM} = 16\text{A}$, $T_J = 150^\circ\text{C}^*$
 $I_{FM} = 16\text{A}$, $T_J = 25^\circ\text{C}^*$
 V_{RRM} , $T_J = 125^\circ\text{C}^*$
 V_{RRM} , $T_J = 25^\circ\text{C}$
 $V_R = 5.0\text{V}$, $T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 μ sec Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range
Operating junction temp range
Max thermal resistance
Mounting torque
Weight

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

-55°C to 175°C
 -55°C to 175°C
 2.0°C/W
8-12 inch pounds (6-32 screw)
.08 ounces (2.3 grams) typical

MS1635 — MS1645

Figure 1
Typical Forward Characteristics

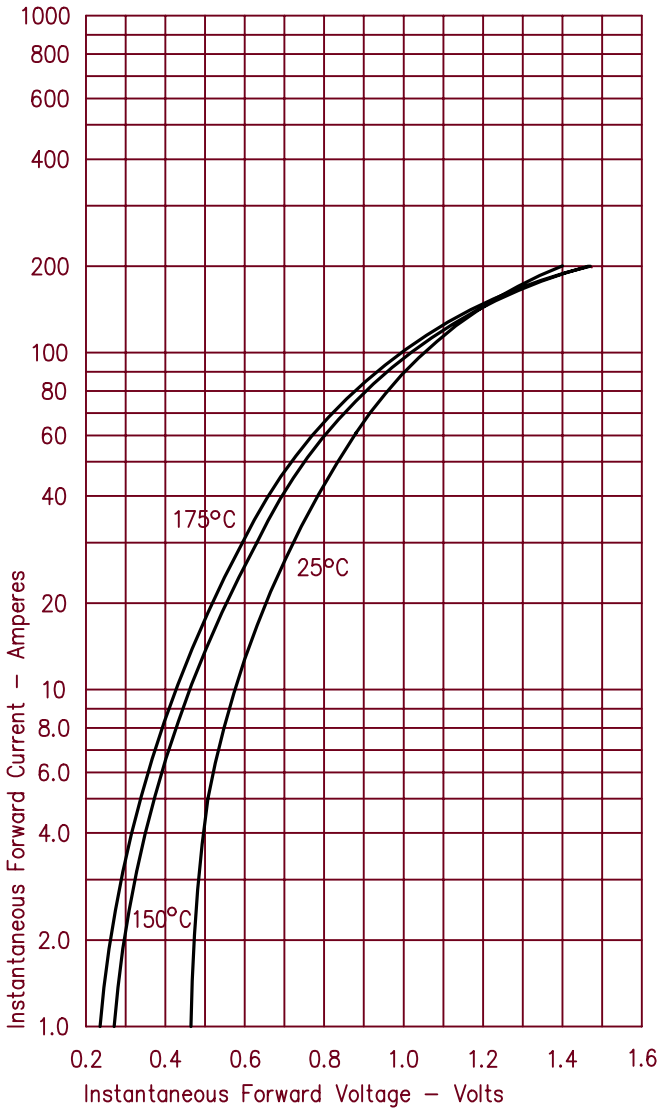


Figure 3
Typical Junction Capacitance

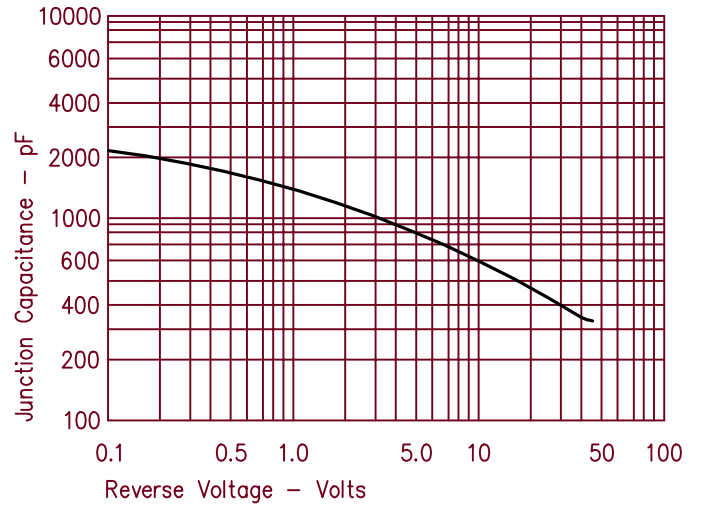


Figure 4
Forward Current Derating

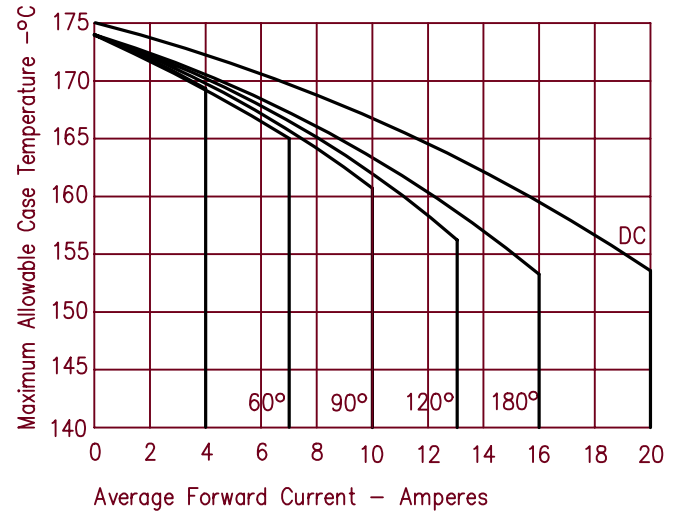


Figure 2
Typical Reverse Characteristics

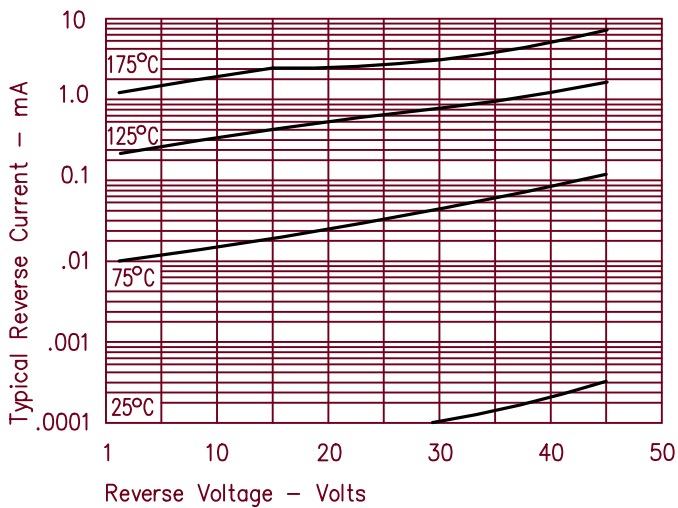


Figure 5
Maximum Forward Power Dissipation

