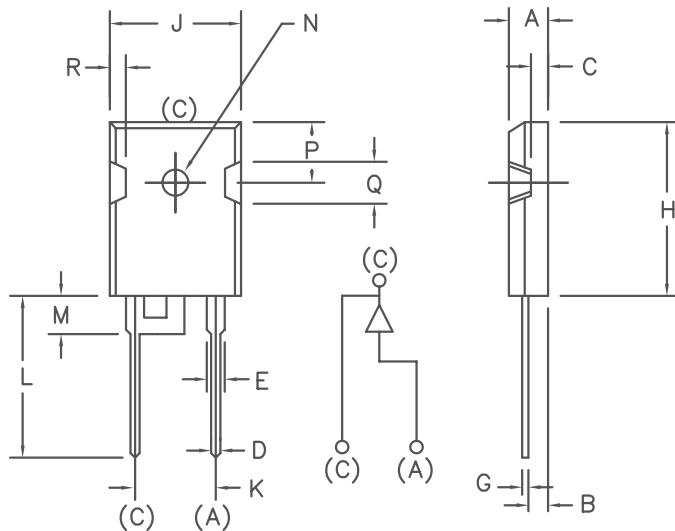


60 Amp Schottky Rectifiers MS60180—MS60200

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Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.185	.209	4.70	5.31	
B	.087	.102	2.21	2.59	
C	.059	.098	1.50	2.49	
D	.040	.055	1.02	1.40	
E	.079	.094	2.01	2.39	
F	---	---	---	---	
G	.016	.031	.410	0.78	
H	.819	.883	20.80	22.4	
J	.627	.650	15.93	16.5	
K	.430	---	10.92	---	
L	.790	.810	20.07	20.6	
M	.157	.180	3.99	4.57	
N	.139	.144	3.53	3.66	Dia.
P	.255	.300	6.48	7.62	
Q	.170	.210	4.32	5.33	
R	.080	.110	2.03	2.79	

Microsemi Catalog Number	Industry Part Number	Repetitive Peak Reverse Voltage	Transient Peak Reverse Voltage
MS60180		180V	180V
MS60200		200V	200V

- Schottky Barrier Rectifier
- V_{RRM} 180 to 200 volts
- Low forward voltage
- 175°C junction temperature
- Guard ring for reverse protection

Electrical Characteristics

Average forward current	$I_F(AV)$ 60 Amps	$T_C = 147^\circ\text{C}$, square wave
Maximum surge current	I_{FSM} 1000 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max. peak forward voltage	V_{FM} .85 Volts	$I_{FM} = 60\text{A}$, $T_J = 25^\circ\text{C}^*$
Typical peak forward voltage	V_{FM} .72 Volts	$I_{FM} = 60\text{A}$, $T_J = 125^\circ\text{C}^*$
Typical peak reverse current	I_{RM} 4 mA	V_{RRM} , $T_J = 125^\circ\text{C}^*$
Max. peak reverse current	I_{RM} 1 mA	V_{RRM} , $T_J = 25^\circ\text{C}$
Typical junction capacitance	C_J 1400 pF	$V_R = 5.0\text{V}$, $T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 μsec . Duty Cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	-55°C to $+175^\circ\text{C}$
Operating junction temp range	T_J	-55°C to $+175^\circ\text{C}$
Max thermal resistance per leg	$R_{\theta JC}$	0.5°C/W Junction to case
Max thermal resistance per pkg		8–10 inch pounds (6–32 screw)
Weight		.22 ounces (6.36 grams) typical

MS60180-MS60200

Figure 1
Typical Forward Characteristics

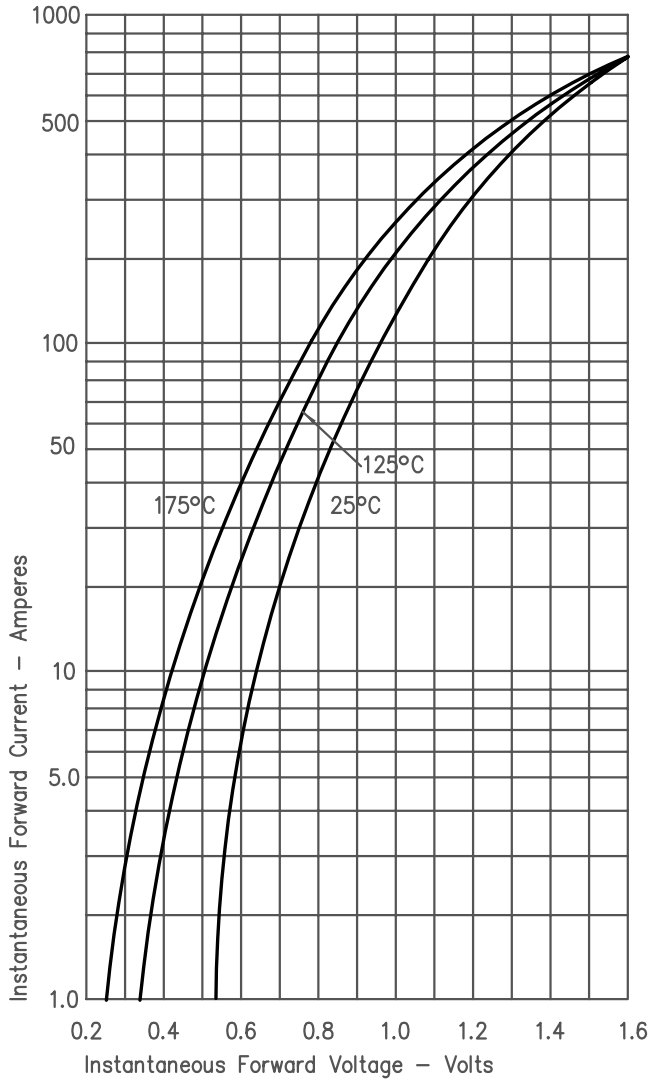


Figure 3
Typical Junction Capacitance

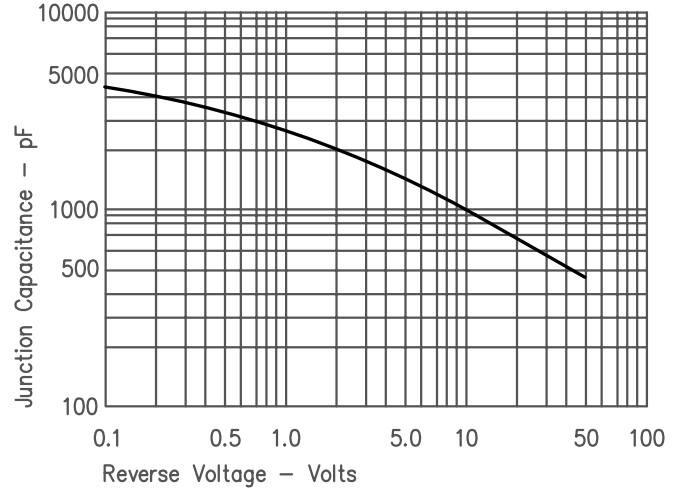


Figure 4
Forward Current Derating

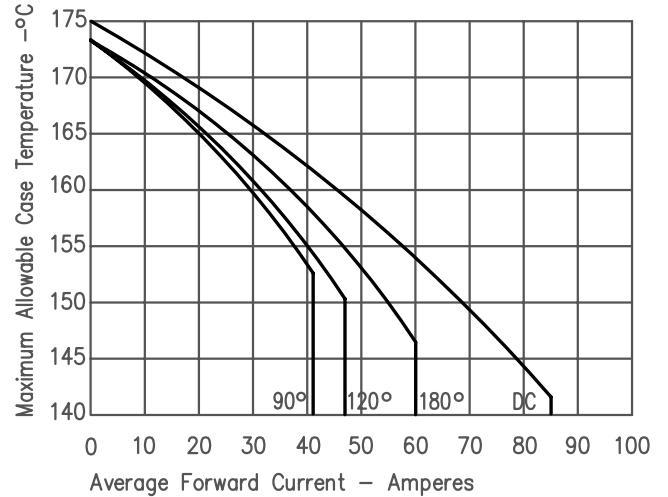


Figure 2
Typical Reverse Characteristics

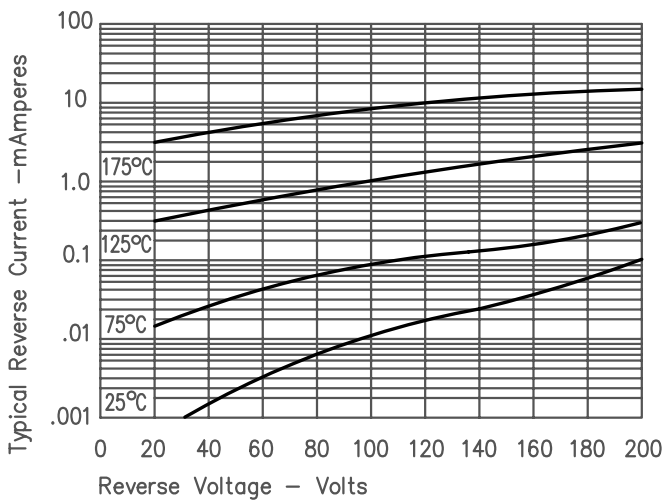


Figure 5
Maximum Forward Power Dissipation

