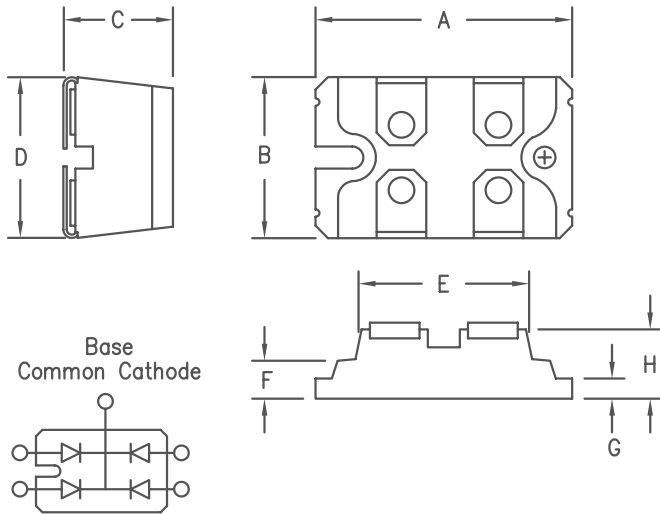


4 X 80A Schottky Barrier Rectifier SPB8080 — SPB80100



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	1.494	1.504	37.95	38.20	
B	0.976	0.986	24.79	25.04	
C	0.472	0.480	12.00	12.24	
D	0.990	1.000	25.15	25.40	
E	1.049	1.059	26.67	26.90	
F	0.164	0.174	4.16	4.42	
G	0.080	0.084	2.03	2.13	
H	0.372	0.378	9.45	9.60	

SOT-227

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
SPB8080	80V	80V
SPB8090	90V	90V
SPB80100	100V	100V

- Common Cathode Base
- Low Forward Voltage Drop
- 4 Schottky Rectifiers in one pkg.
- 80–100V @ 80A/leg
- Low Switching losses

Electrical Characteristics

Average forward current per leg	$I_F(AV)$ 80 Amps	$T_C = 129^\circ C$ Square wave
Average forward current per package	$I_F(AV)$ 320 Amps	$T_C = 129^\circ C$ Square wave
Maximum surge current per leg	I_{FSM} 1250 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Maximum repetitive reverse current per leg	$I_{R(OV)}$ 2 Amps	$f = 1$ KHz, $25^\circ C$, $1 \mu sec$ square wave
Max peak forward voltage per leg	V_{FM} 0.90 Volts	$I_{FM} = 80A$; $T_J = 25^\circ C^*$
Max peak reverse current per leg	I_{RM} 3 mA	$V_{RRM}, T_J = 25^\circ C^*$
Typical junction capacitance per leg	C_J 2400 pF	$V_R = 5.0V, T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	$-55^\circ C$ to $175^\circ C$
Operating junction temp range	T_J	$-55^\circ C$ to $175^\circ C$
Max thermal resistance per leg	$R_{\theta JC}$	$0.60^\circ C/W$
Max thermal resistance per pkg	$R_{\theta JC}$	$0.15^\circ C/W$
Mounting Torque		9–13 inch pounds
Weight		1.1 ounces (30 grams) typical

SPB8080 — SPB80100

Figure 1
Typical Forward Characteristics — Per Leg

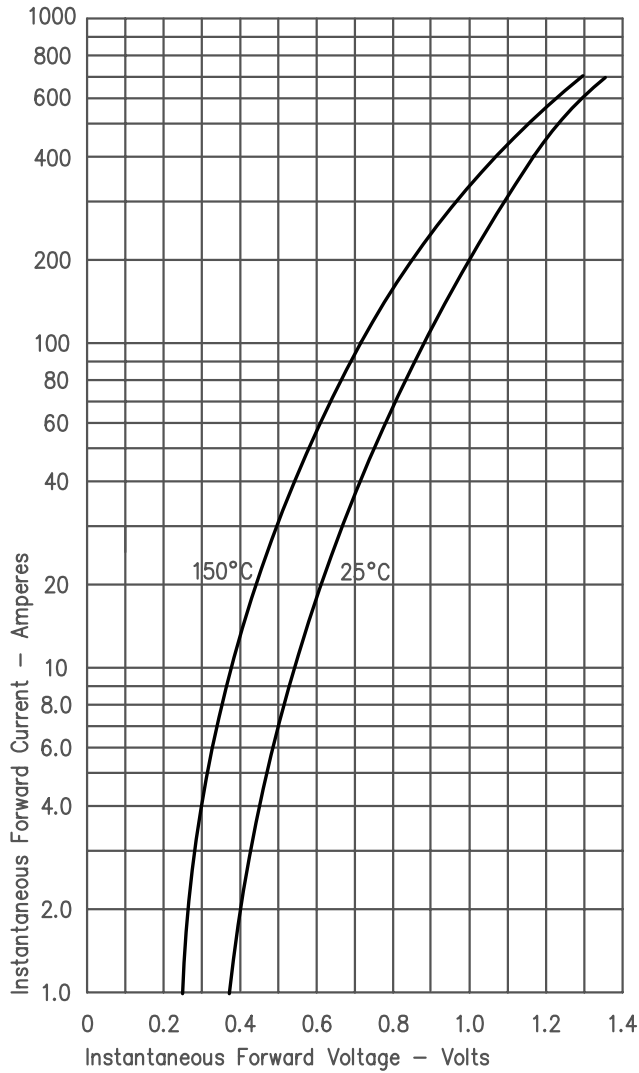


Figure 3
Typical Junction Capacitance — Per Leg

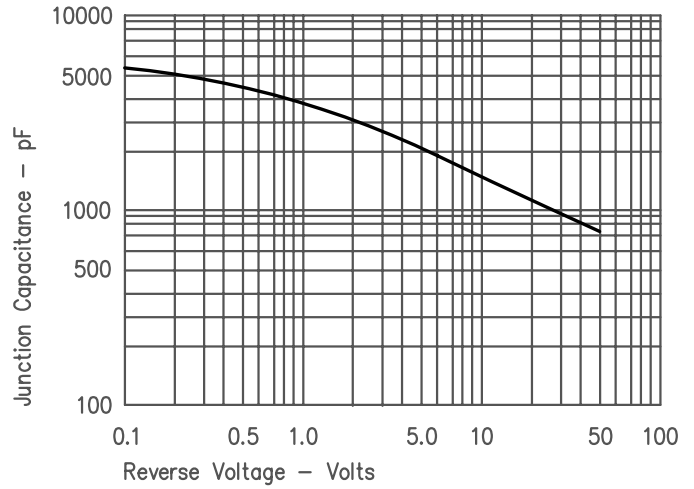


Figure 4
Forward Current Derating — Per Leg

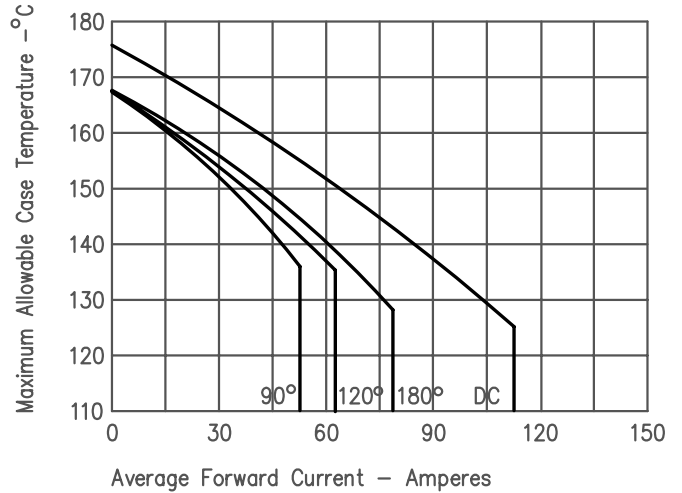


Figure 2
Typical Reverse Characteristics — Per Leg

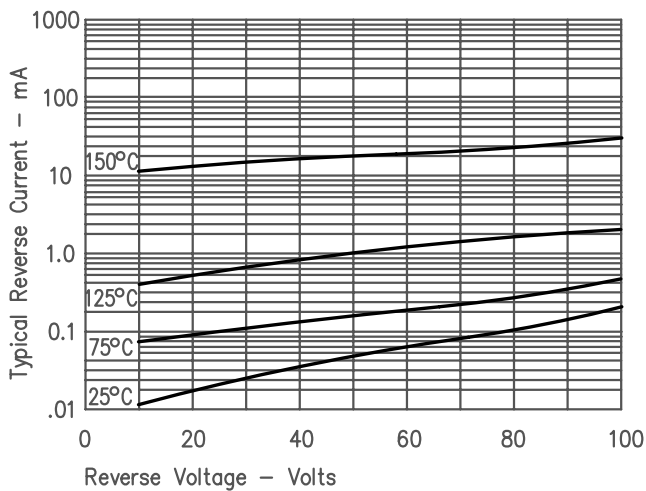


Figure 5
Maximum Forward Power Dissipation — Per Leg

