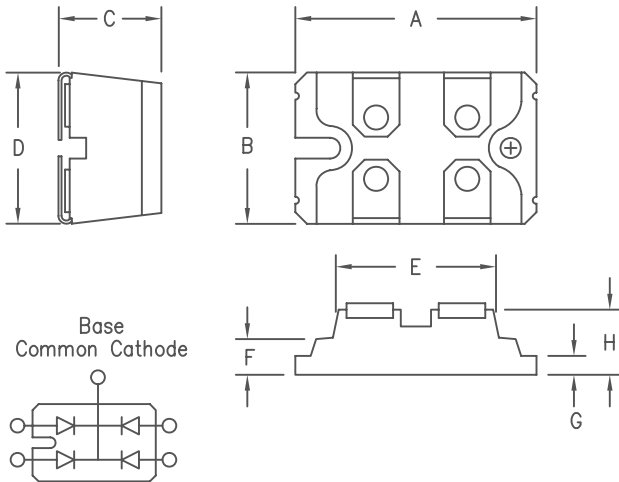


4 X 80A Schottky Barrier Rectifier SPB8035 — SPB8045



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
SPB8035	35V	35V
SPB8040	40V	40V
SPB8045	45V	45V

- Common Cathode Base
- Low Forward Voltage Drop
- 4 Schottky Rectifiers in one pkg.
- 35–45V @ 80A/leg
- Low Switching losses

Electrical Characteristics		
Average forward current per leg	I _{F(AV)} 80 Amps	T _C = 95°C Square wave
Average forward current per package	I _{F(AV)} 320 Amps	T _C = 95°C Square wave
Maximum surge current per leg	I _{FSM} 1250 Amps	8.3ms, half sine, T _J = 175°C
Maximum repetitive reverse current per leg	I _{R(OV)} 2 Amps	f = 1 KHz, 25°C, 1 μsec square wave
Max peak forward voltage per leg	V _{FM} 0.57 Volts	I _{FM} = 80A; T _J = 25°C*
Max peak reverse current per leg	I _{RM} 4 mA	V _{RRM} , T _J = 25°C*
Typical junction capacitance per leg	C _J 3500 pF	V _R = 5.0V, T _J = 25°C

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

Thermal and Mechanical Characteristics		
Storage temp range	T _{STG}	–55°C to 175°C
Operating junction temp range	T _J	–55°C to 150°C
Max thermal resistance per leg	R _{θJC}	0.60°C/W
Max thermal resistance per pkg	R _{θJC}	0.15°C/W
Mounting Torque		9–13 inch pounds
Weight		1.1 ounces (30 grams) typical

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05-30-07 Rev. 1

SPB8035 — SPB8045

Figure 1
Typical Forward Characteristics — Per Leg

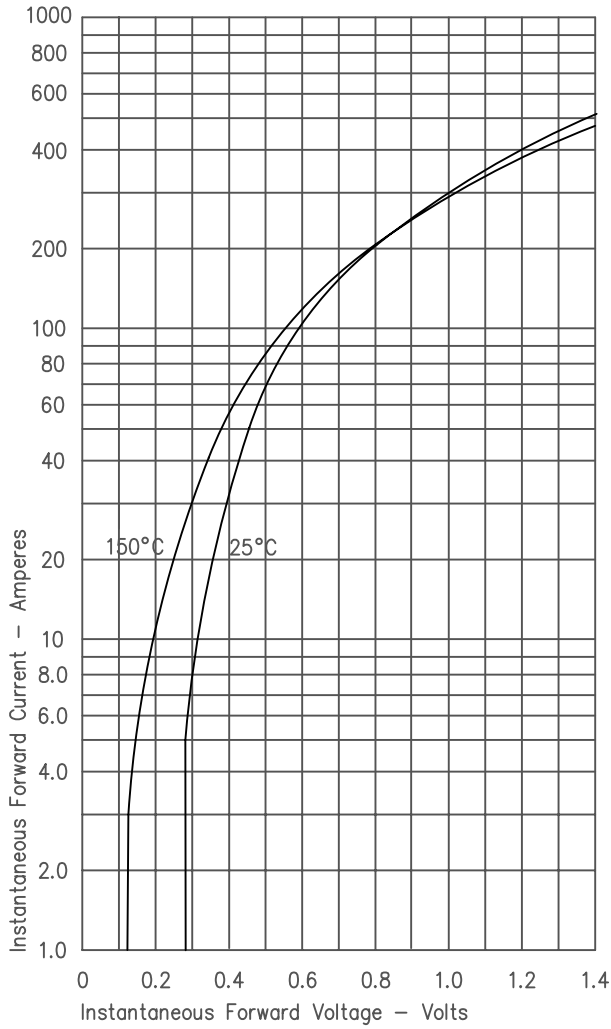


Figure 3
Typical Junction Capacitance — Per Leg

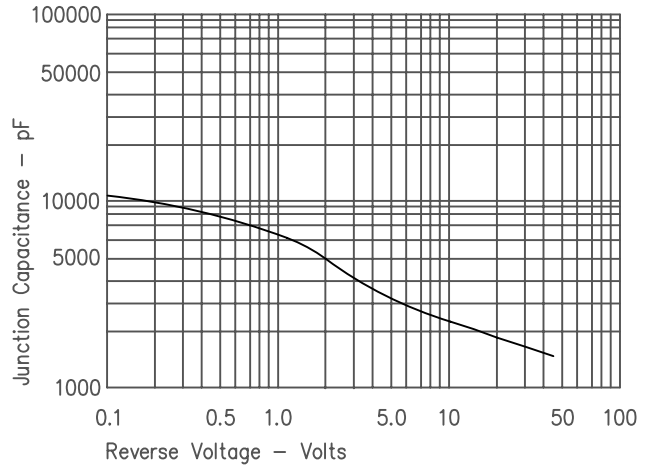


Figure 4
Forward Current Derating — Per Leg

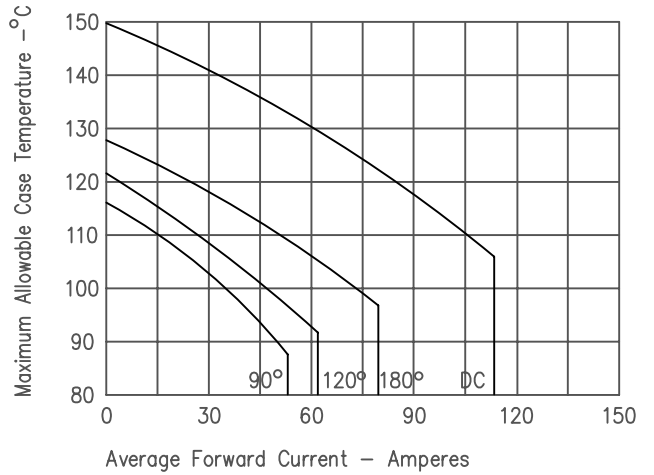


Figure 2
Typical Reverse Characteristics — Per Leg

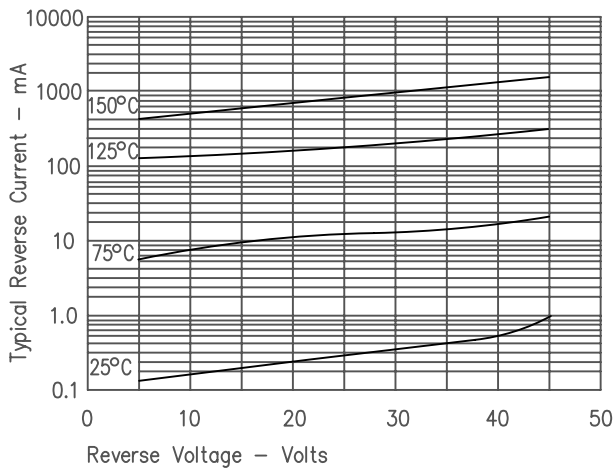


Figure 5
Maximum Forward Power Dissipation — Per Leg

