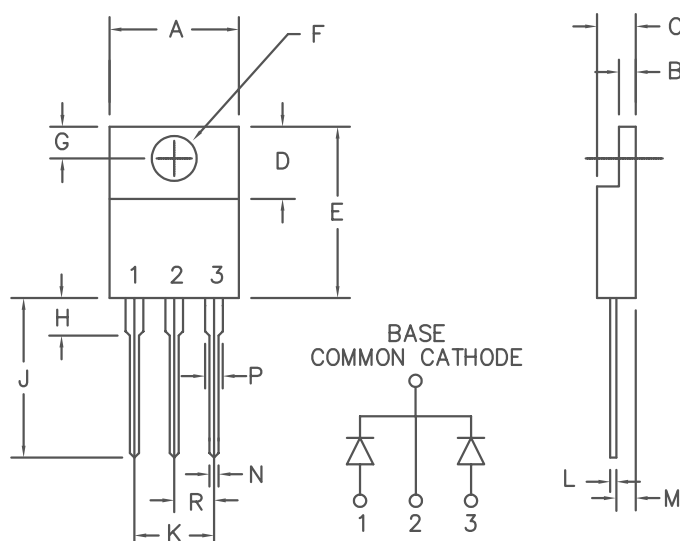


10 Amp Schottky Barrier Rectifiers FST10180 — FST10200



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	.161	3.53	4.09	Dia.
G	.100	.135	2.54	3.43	
H	---	.250	---	6.35	
J	.500	.580	12.70	14.73	
K	.190	.210	4.83	5.33	
L	.014	.022	.357	.559	
M	.080	.115	2.03	2.92	
N	.015	.040	.380	1.02	
P	.045	.070	1.14	1.78	
R	.090	.110	2.29	2.79	

PLASTIC TO-220AB

Microsemi Catalog
Number

FST10180

FST10200

Industrial
Part Number

Working Peak
Reverse Voltage

180V

200V

Repetitive Peak
Reverse Voltage

180V

200V

- Schottky Barrier Rectifier
- VRRM 180 to 200 Volts
- 2 x 5 Amperes Avg.
- 150°C Junction temperature
- High Surge Capacity

Electrical Characteristics

Average Forward Current per pkg.
Average Forward Current per leg
Maximum Surge Current per leg
Max. Peak Forward Voltage per leg
Typ. Peak Forward Voltage per leg
Typ. Peak Reverse Current per leg
Max. Peak Reverse Current per leg
Typical Junction Capacitance

$I_F(AV)$ 10 Amps
 $I_F(AV)$ 5 Amps
 I_{FSM} 200 Amps
 V_{FM} 0.84 Volts
 V_{FM} 0.65 Volts
 I_{RM} 150 μA
 I_{RM} 100 μA
 C_J 135 pF

$T_C = 137^\circ C$, Square wave
 $T_C = 137^\circ C$, Square wave
8.3ms, half sine, $T_J = 150^\circ C$
 $I_{FM} = 5A$, $T_J = 25^\circ C^*$
 $I_{FM} = 5A$, $T_J = 125^\circ C^*$
 V_{RRM} , $T_J = 125^\circ C^*$
 V_{RRM} , $T_J = 25^\circ C$
 $V_R = 5.0V$, $T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics

Storage temp range
Operating junction temp range
Max thermal resistance per leg
Max thermal resistance per pkg.
Typical thermal resistance (greased)
Mounting torque
Weight

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

$-55^\circ C$ to $175^\circ C$
 $-55^\circ C$ to $175^\circ C$
3.6°C/W Junction to case
1.8°C/W Junction to case
0.5°C/W Case to sink
8–12 inch pounds maximum (#6 screw)
.08 ounces (2.3 grams) typical

10/25/05 Rev. 1

FST10180 — FST10200

Figure 1
Typical Forward Characteristics — Per Leg

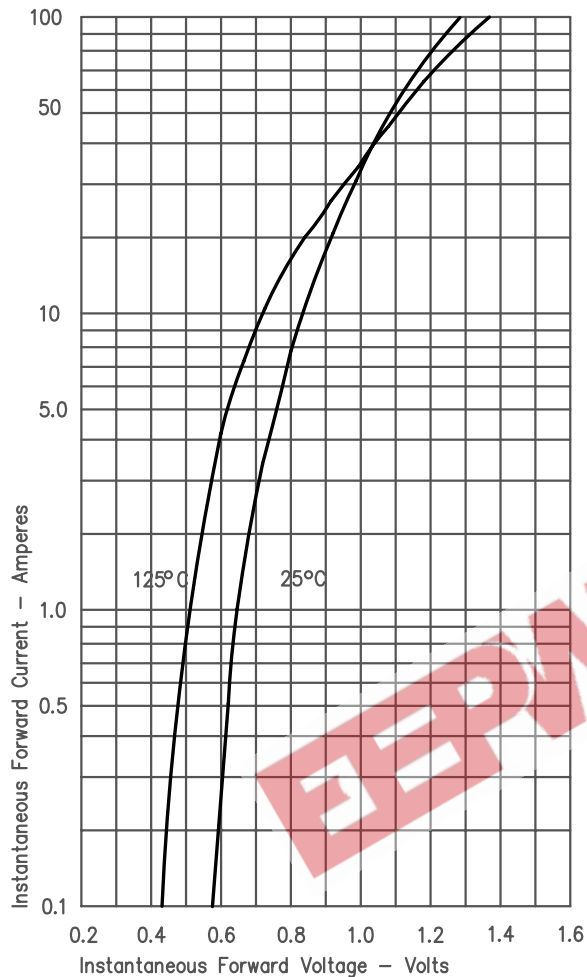


Figure 3
Typical Junction Capacitance — Per Leg

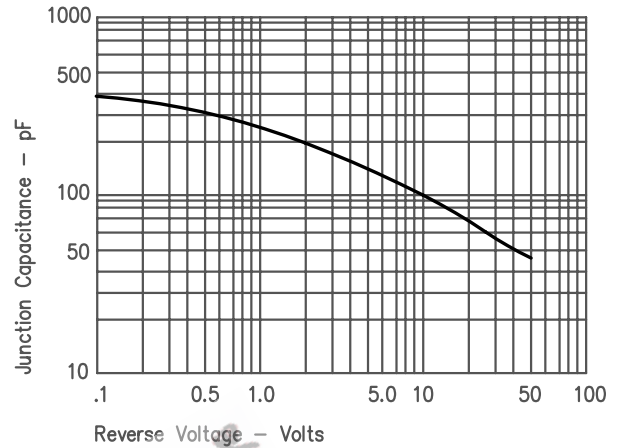


Figure 4
Forward Current Derating — Per Leg

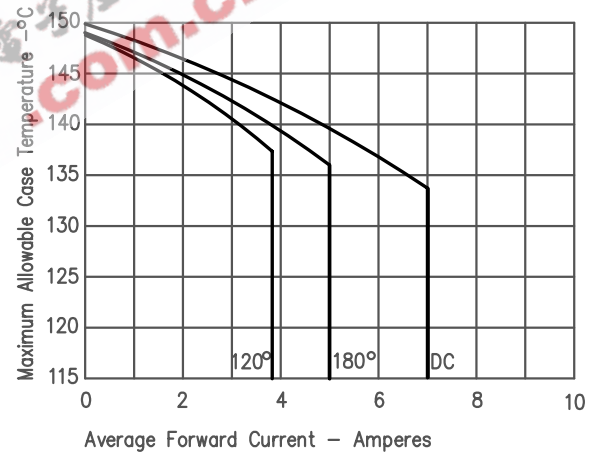


Figure 2
Typical Reverse Characteristics — Per Leg

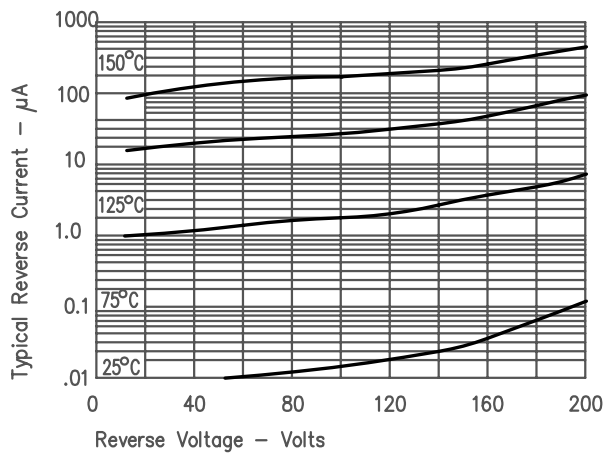


Figure 5
Maximum Forward Power Dissipation — Per Leg

