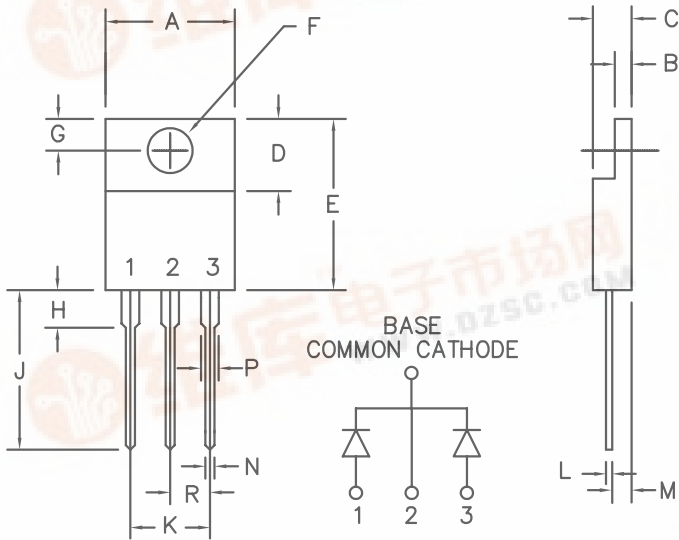


10 Amp Schottky Barrier Rectifiers FST10180 — FST10200



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	Industrial Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
FST10180		180V	180V
FST10200		200V	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.	I _{F(AV)} 10 Amps	T _C = 137°C, Square wave
Average Forward Current per leg	I _{F(AV)} 5 Amps	T _C = 137°C, Square wave
Maximum Surge Current per leg	I _{FSM} 200 Amps	8.3ms, half sine, T _J = 150°C
Max. Peak Forward Voltage per leg	V _{FM} 0.84 Volts	I _{FM} = 5A, T _J = 25°C*
Typ. Peak Forward Voltage per leg	V _{FM} 0.65 Volts	I _{FM} = 5A, T _J = 125°C*
Typ. Peak Reverse Current per leg	I _{RM} 150 μA	VRRM, T _J = 125°C*
Max. Peak Reverse Current per leg	I _{RM} 100 μA	VRRM, T _J = 25°C
Typical Junction Capacitance	C _J 135 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 175°C
Max thermal resistance per leg	R _{θJC}	3.6°C/W Junction to case
Max thermal resistance per pkg.	R _{θJC}	1.8°C/W Junction to case
Typical thermal resistance (greased)	R _{θCS}	0.5°C/W Case to sink
Mounting torque		8-12 inch pounds maximum (#6 screw)
Weight		.08 ounces (2.3 grams) typical



FST10180 – FST10200

Figure 1
Typical Forward Characteristics – Per Leg

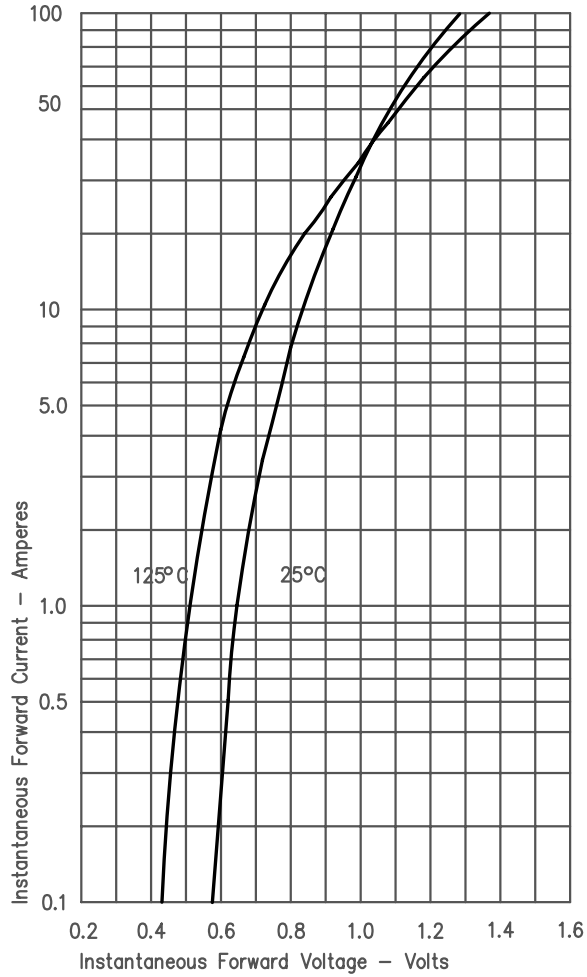


Figure 3
Typical Junction Capacitance – Per Leg

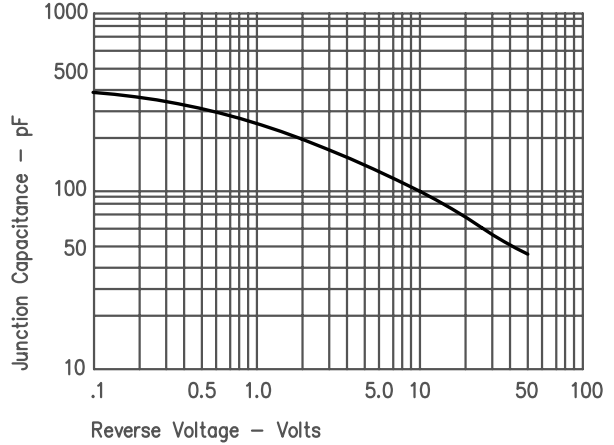


Figure 4
Forward Current Derating – Per Leg

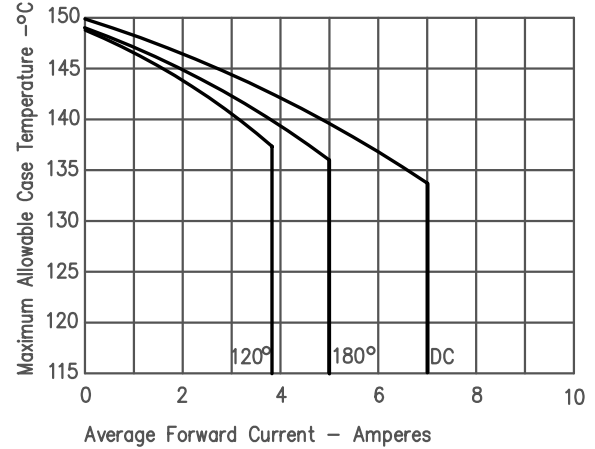


Figure 2
Typical Reverse Characteristics – Per Leg

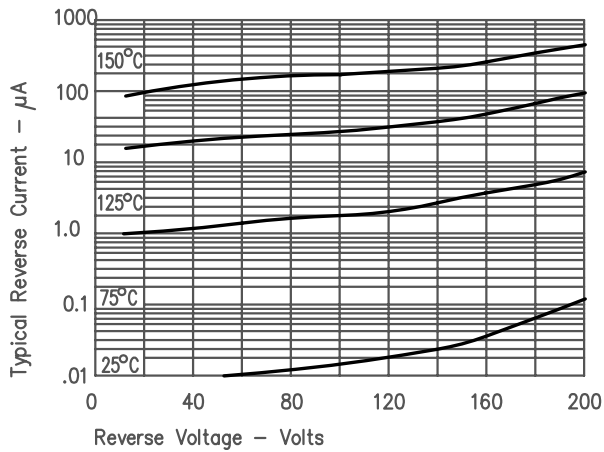


Figure 5
Maximum Forward Power Dissipation – Per Leg

