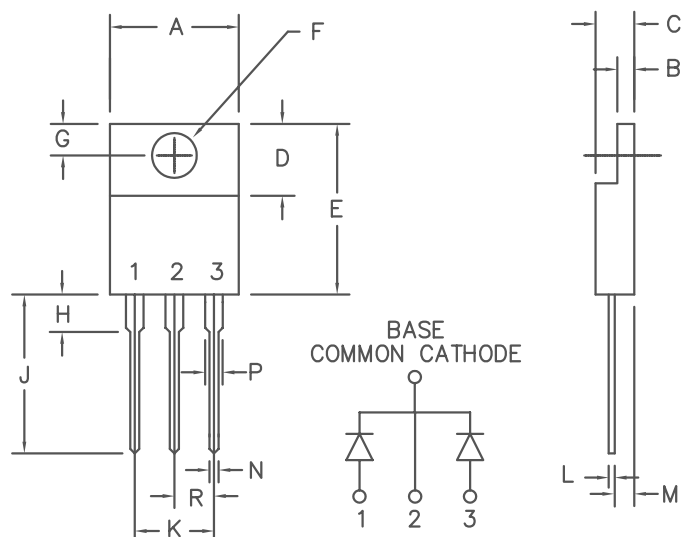


20 Amp Schottky Rectifiers FST20180—FST20200



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	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
FST20180		180V	180V
FST20200	MBR20200CT	200V	200V

- Schottky barrier rectifier
- V_{RRM} 180–200 Volts
- 2 X 10 Amperes Avg.
- High surge capacity
- 175°C Junction temperature

Electrical Characteristics

Average Forward Current per pkg.	$I_F(AV)$ 20 Amps	$T_C = 155^\circ C$, Square wave
Average Forward Current per leg	$I_F(AV)$ 10 Amps	$T_C = 155^\circ C$, Square wave
Maximum Surge Current per leg	I_{FSM} 225 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max. Peak Forward Voltage per leg	V_{FM} .88 Volts	$I_{FM} = 10A$, $T_J = 25^\circ C^*$
Typical Peak Forward Voltage per leg	V_{FM} .73 Volts	$I_{FM} = 10A$, $T_J = 175^\circ C^*$
Typ. Peak Reverse Current per leg	I_{RM} 200 μA	V_{RRM} , $T_J = 125^\circ C^*$
Max. Peak Reverse Current per leg	I_{RM} 100 μA	V_{RRM} , $T_J = 25^\circ C$
Typical Junction Capacitance per leg	C_J 190 pF	$V_R = 5.0V$, $T_J = 25^\circ C$

*Pulse test: Pulse width 300 usec. 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	$R_{\theta JC}$	2.4°C/W Junction to case
Max thermal resistance per pkg.	$R_{\theta JC}$	1.2°C/W Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	0.5°C/W Case to sink
Mounting torque		8–12 inch pounds (#6 screw)
Weight		.08 ounces (2.3 grams) typical

FST20180–FST20200

Figure 1
Typical Forward Characteristics

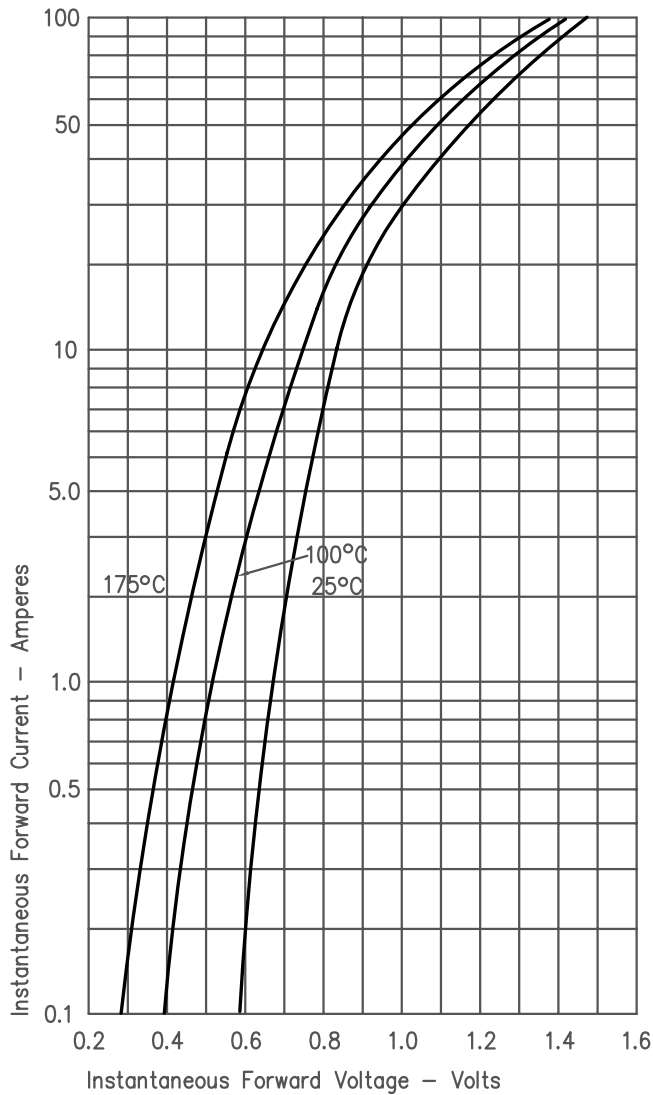


Figure 3
Typical Junction Capacitance

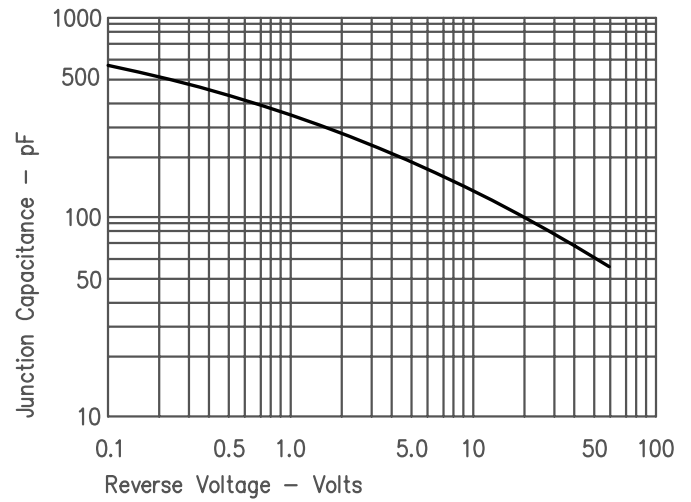


Figure 4
Forward Current Derating

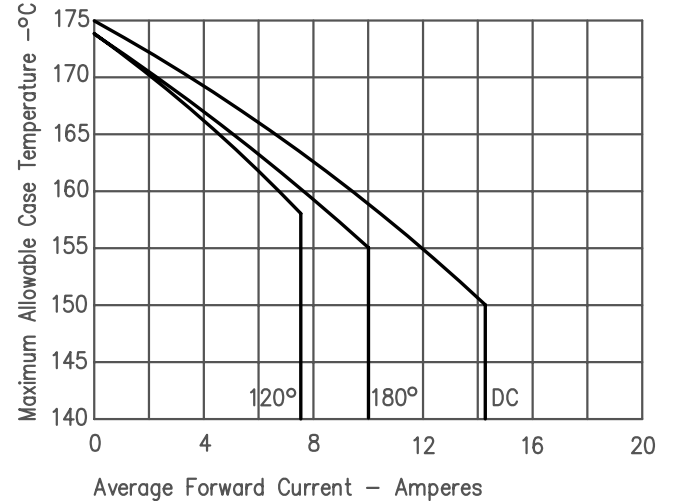


Figure 2
Typical Reverse Characteristics

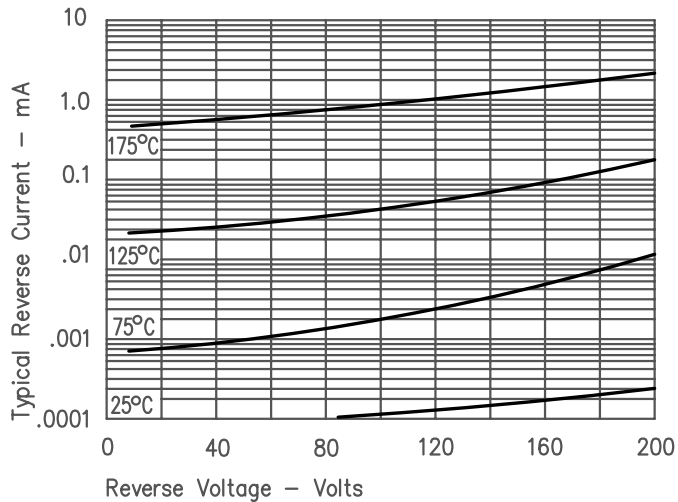


Figure 5
Maximum Forward Power Dissipation

