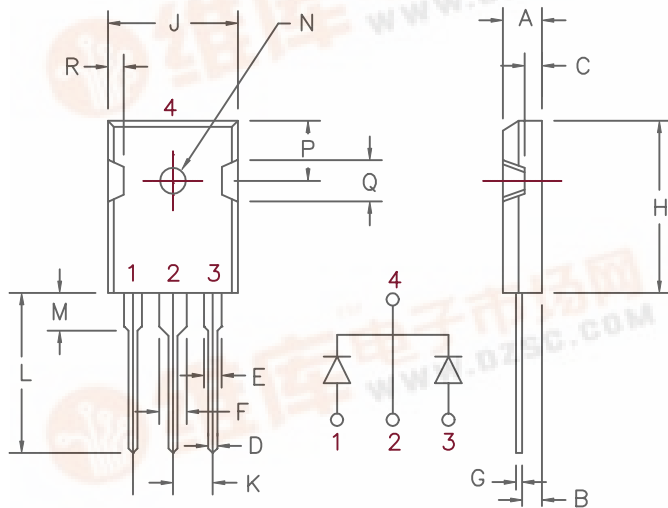


50Amp Schottky Barrier Rectifier

FST5080 — FST50100

查询FST50100供应商

通多邦, 专业PCB打样工厂, 24小时加急出货



Similar to TO-247AD

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.185	.209	4.70	5.31	
B	.087	.102	2.21	2.59	
C	.059	.098	1.50	2.49	
D	.040	.055	1.02	1.40	
E	.079	.094	2.01	2.39	
F	.118	.133	3.00	3.38	
G	.016	.031	.410	0.78	
H	.819	.883	20.80	22.4	
J	.627	.650	15.93	16.5	
K	.215	—	5.46	—	Typ.
L	.790	.810	20.07	20.6	
M	.157	.180	3.99	4.57	
N	.139	.144	3.53	3.66	Dia.
P	.255	.300	6.48	7.62	
Q	.170	.210	4.32	5.33	
R	.080	.110	2.03	2.79	

Microsemi Catalog
Number

FST5080
FST5090
FST50100

Repetitive Peak
Reverse Voltage

80V
90V
100V

Transient Peak
Reverse Voltage

80V
90V
100V

- Guard ring for reverse protection
- Low power loss, high efficiency
- High surge capacity
- 175°C Junction Temperature
- VRRM 80 to 100 Volts

Electrical Characteristics

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

$I_F(AV)$ 50 Amps
 $I_F(AV)$ 25 Amps
 I_{FSM} 400 Amps
 V_{FM} .62 Volts
 V_{FM} .85 Volts
 I_{RM} 15 mA
 I_{RM} 500 μA
 C_J 920 pF

$T_C = 129^\circ C$, Square wave, $R_{\theta JC} = 1.0^\circ C/W$
 $T_C = 129^\circ C$, Square wave, $R_{\theta JC} = 2.0^\circ C/W$
8.3ms, half sine, $T_J = 175^\circ C$
 $I_{FM} = 25A$, $T_J = 175^\circ C^*$
 $I_{FM} = 25A$, $T_J = 25^\circ C^*$
 V_{RRM} , $T_J = 125^\circ C^*$
 V_{RRM} , $T_J = 25^\circ C$
 $VR = 5.0V$, $T_J = 25^\circ C$

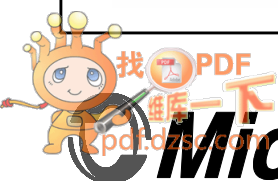
*Pulse test: Pulse width 300 usec. Duty Cycle 2%

Thermal and Mechanical Characteristics

Storage temp range
Operating junction temp range
Max thermal resistance per leg
Max thermal resistance per pkg.
Mounting Torque
Weight

TSTG
 T_J
 $R_{\theta JC}$
 $R_{\theta JC}$

$-55^\circ C$ to $+175^\circ C$
 $-55^\circ C$ to $+175^\circ C$
 $2.0^\circ C/W$
 $1.0^\circ C/W$
5–10 inch pounds (#6 screw)
.22 ounces (6.36 grams) typical



COLORADO

800 Hoyt Street
Broomfield, CO. 80020
PH: (303) 469-2161
FAX: (303) 466-3775

2-4-00 Rev. 3

FST5080 — FST50100

Figure 1
Typical Forward Characteristics – Per Leg

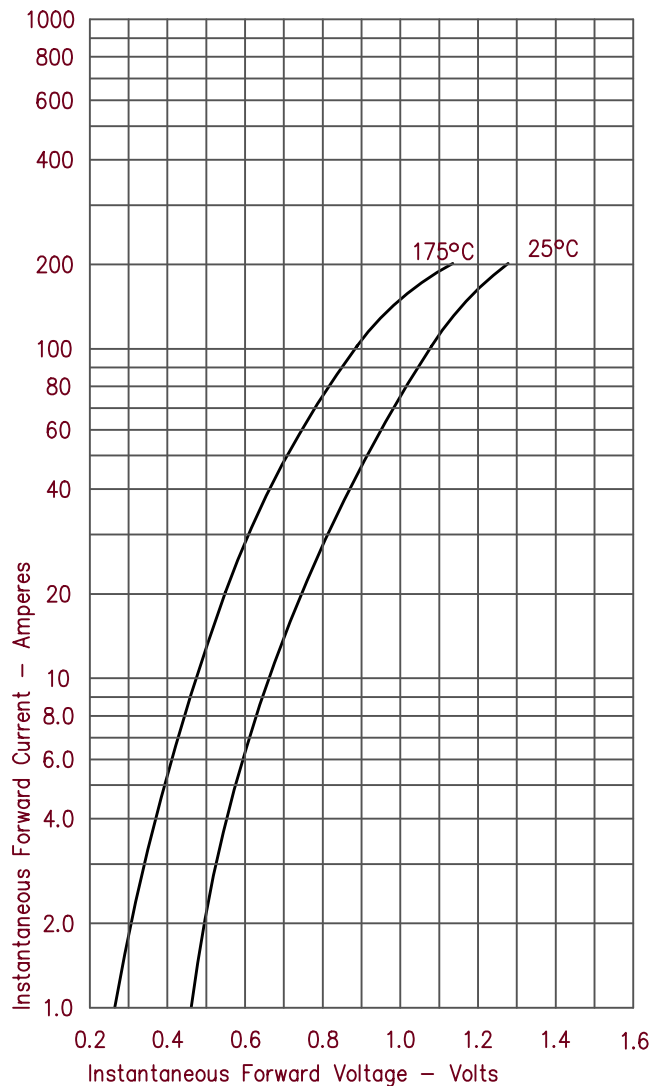


Figure 3
Typical Junction Capacitance – Per Leg

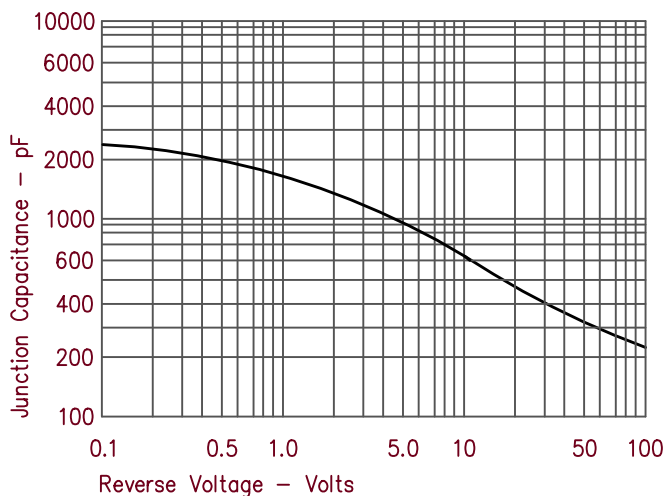


Figure 4
Forward Current Derating – Per Leg

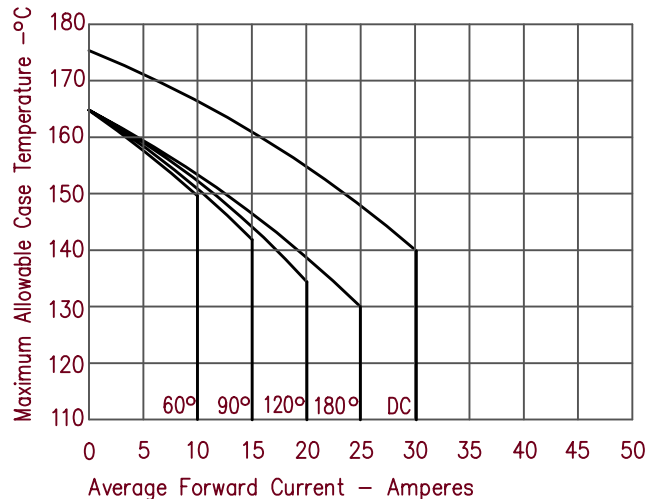


Figure 2
Typical Reverse Characteristics – Per Leg

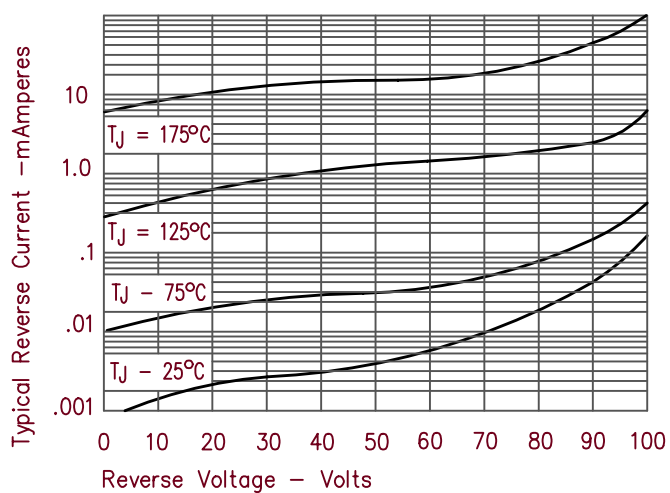


Figure 5
Maximum Forward Power Dissipation – Per Leg

