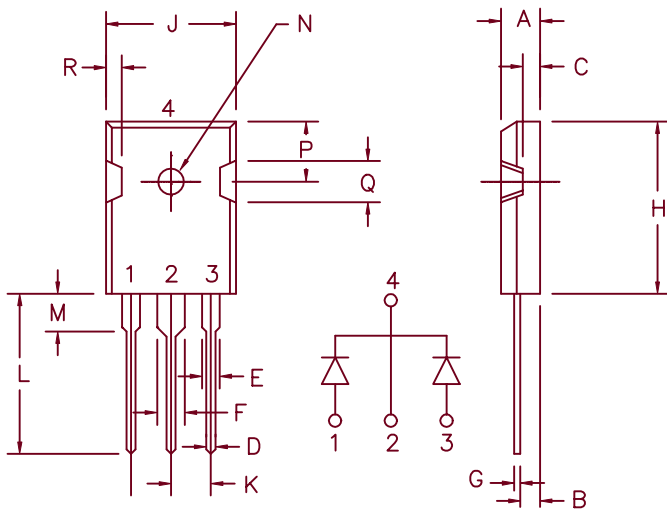


60 Amp Schottky Barrier Rectifier FST5535 — FST5545



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

FST5535
FST5540
FST5545

Repetitive Peak Reverse Voltage

35V
40V
45V

Transient Peak Reverse Voltage

35V
40V
45V

- Schottky Barrier Rectifier
- Reverse energy tested
- Guard ring for reverse protection
- Low forward voltage
- 150°C junction temperature
- VRRM 35 to 45 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)} 60 Amps
I_{F(AV)} 30 Amps
I_{FSM} 400 Amps
V_{FM} .53 Volts
V_{FM} .60 Volts
I_{RM} 1 Amp
I_{RM} 2 mA
C_J 1200 pF

T_C = 99°C, square wave, R_{θJC} = 0.8°C/W
T_C = 99°C, square wave, R_{θJC} = 1.6°C/W
8.3ms, half sine, T_J = 150°C
I_{FM} = 30A, T_J = 150°C*
I_{FM} = 30A, T_J = 25°C*
VRRM, T_J = 150°C*
VRRM, T_J = 25°C
VR = 5.0V, T_J = 25°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
Weight

TSTG
T_J
R_{θJC}
R_{θJC}

-55°C to +150°C
-55°C to +150°C
1.6°C/W Junction to case
0.8°C/W Junction to case
.22 ounces (6.36 grams) typical

FST5535— FST5545

Figure 1
Typical Forward Characteristics – Per Leg

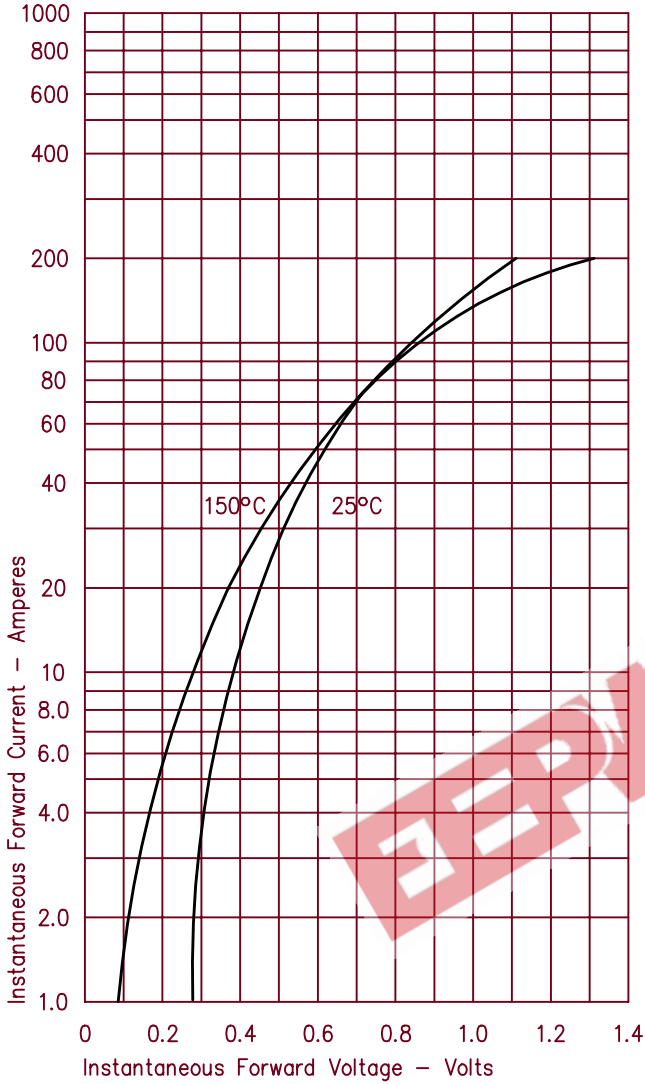


Figure 3
Typical Junction Capacitance – Per Leg

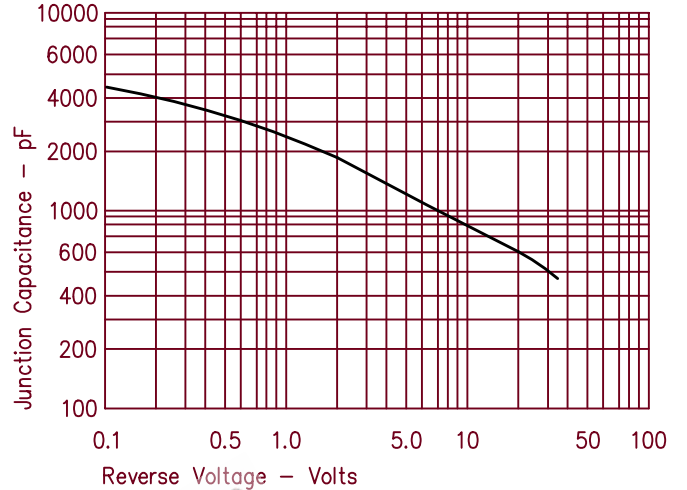


Figure 4
Forward Current Derating – Per Leg

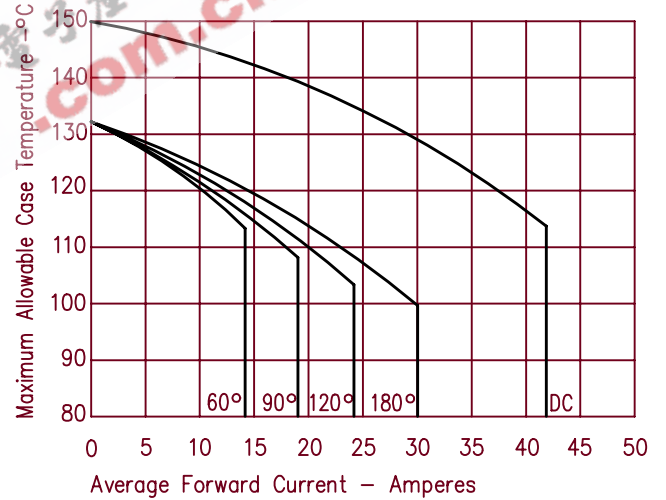


Figure 2
Typical Reverse Characteristics – Per Leg

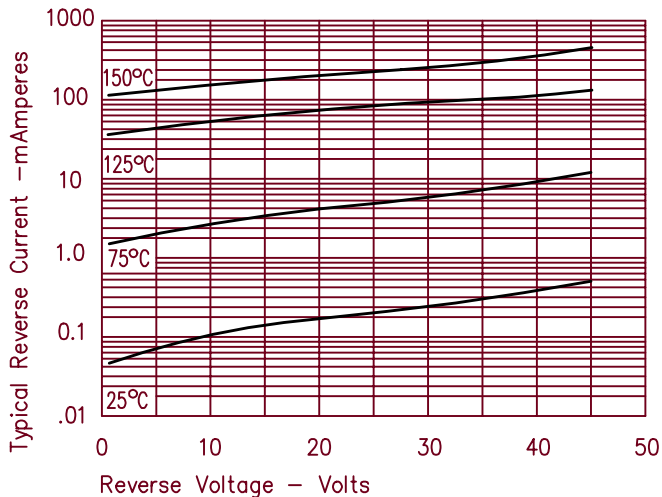


Figure 5
Maximum Forward Power Dissipation – Per Leg

