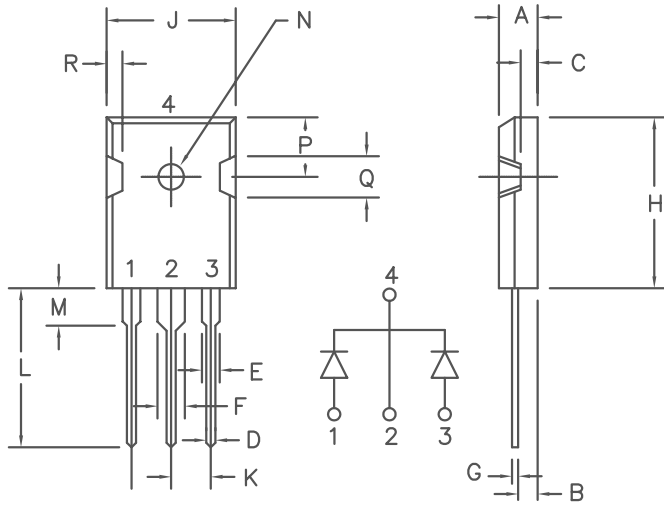


60 Amp Schottky Rectifier FST6630



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
FST6630

Industry
Part Number

Working Peak
Reverse Voltage
30V

Repetitive Peak
Reverse Voltage
30V

- Schottky Barrier Rectifier
- 150°C Junction temperature
- Guard ring reverse protection
- Low Power Loss

Electrical Characteristics

Average forward current per pkg.
Average forward current per leg
Maximum surge current per leg
Max. repetitive reverse current
Max. peak forward voltage per leg
Max. peak forward voltage per leg
Max. peak reverse current per leg
Typical peak reverse current per leg
Typical junction capacitance per leg

$I_{F(AV)}$ 60 Amps
 $I_{F(AV)}$ 30 Amps
 I_{FSM} 600 Amps
 $I_{R(OV)}$ 2 Amps
 V_{FM} .47 Volts
 V_{FM} .41 Volts
 I_{RM} 3.5 mA
 I_{RM} 300 mA
 C_J 2040 pF

$T_C = 108^\circ\text{C}$, square wave, $R_{\theta JC} = 0.7^\circ\text{C/W}$
 $T_C = 108^\circ\text{C}$, square wave, $R_{\theta JC} = 1.4^\circ\text{C/W}$
8.3ms, half sine
 $f = 1\text{KHZ}$, 25°C , 1us square wave
 $I_{FM} = 30\text{A}$, $T_J = 25^\circ\text{C}^*$
 $I_{FM} = 30\text{A}$, $T_J = 125^\circ\text{C}^*$
 V_{RRM} , $T_J = 25^\circ\text{C}$
 V_{RRM} , $T_J = 125^\circ\text{C}^*$
 $V_R = 5.0\text{V}$, $T_J = 25^\circ\text{C}$

*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°C to $+175^\circ\text{C}$
 -55°C to $+150^\circ\text{C}$
 1.4°C/W
 0.7°C/W
5-10 inch pounds (#6 screw)
.22 ounces (6.36 grams) typical

FST6630

Figure 1
Typical Forward Characteristics – Per Leg

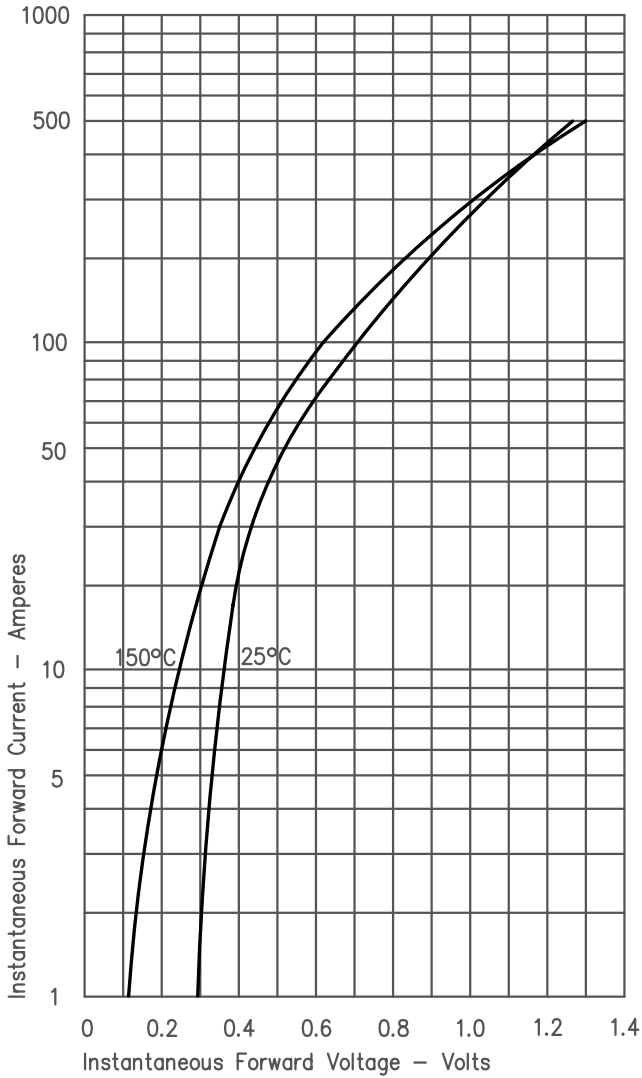


Figure 3
Typical Junction Capacitance – Per Leg

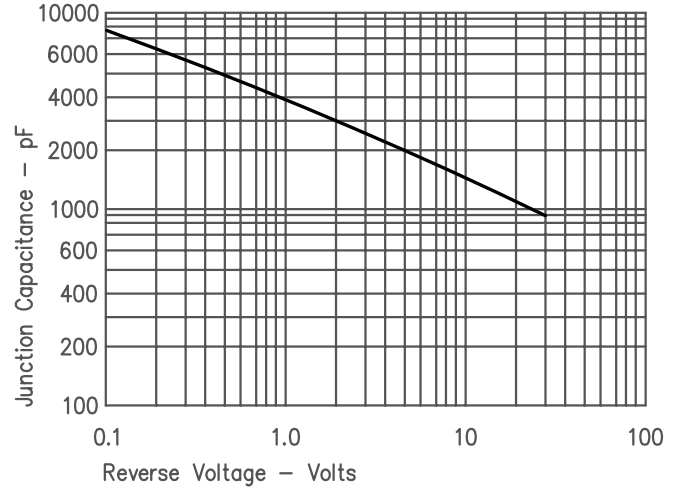


Figure 4
Forward Current Derating – Per Leg

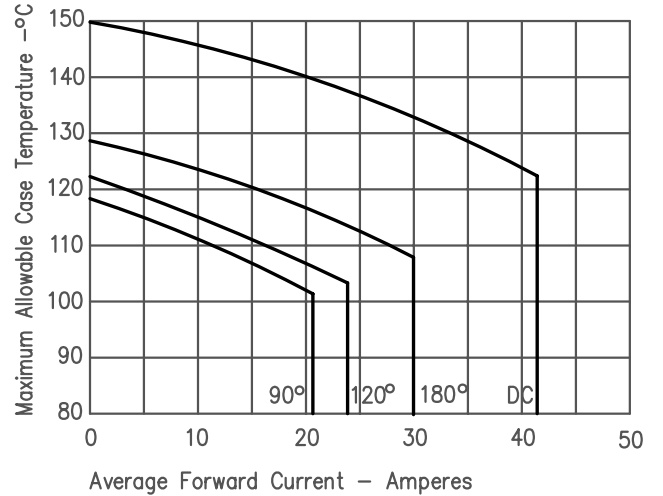


Figure 2
Typical Reverse Characteristics – Per Leg

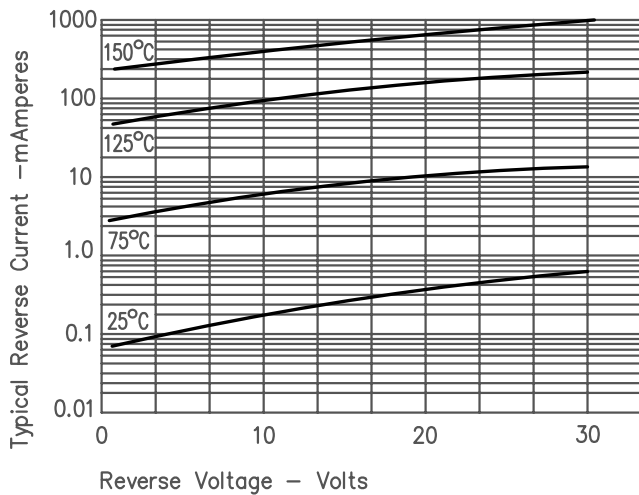


Figure 5
Maximum Forward Power Dissipation – Per Leg

