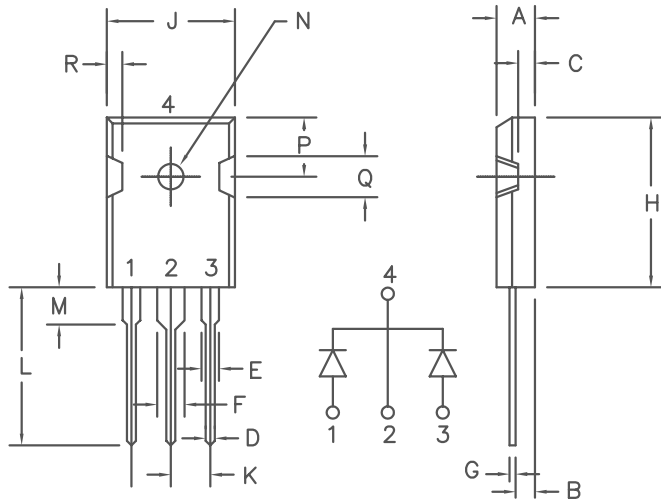


# 30Amp Schottky Barrier Rectifier FST3340 — FST3345



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	Industry Part Number	Repetitive Peak Reverse Voltage	Transient Peak Reverse Voltage
	SBL3030PT	30V	30V
FST3340	SBL3040PT	40V	40V
FST3345		45V	45V

- Schottky Barrier Rectifier
- Guard ring for reverse protection
- Low power loss, high efficiency
- High surge capacity
- VRRM 30 to 45 Volts

Electrical Characteristics		
Average Forward Current per pkg.	$I_F(AV)$ 30Amps	$T_C = 118^\circ C$ , Square wave, $R_{\theta JC} = 0.9^\circ C/W$
Average Forward Current per leg	$I_F(AV)$ 15Amps	$T_C = 118^\circ C$ , Square wave, $R_{\theta JC} = 1.8^\circ C/W$
Maximum Surge Current per leg	$I_{FSM}$ 300 Amps	8.3ms, half sine, $T_J = 150^\circ C$
Max. Peak Forward Voltage per leg	$V_{FM}$ .46 Volts	$I_{FM} = 15A$ , $T_J = 150^\circ C^*$
Max. Peak Forward Voltage per leg	$V_{FM}$ .52 Volts	$I_{FM} = 15A$ , $T_J = 25^\circ C^*$
Typical Peak Reverse Current per leg	$I_{RM}$ 75 mA	$V_{RRM}$ , $T_J = 125^\circ C^*$
Max. Peak Reverse Current per leg	$I_{RM}$ 2 mA	$V_{RRM}$ , $T_J = 25^\circ C$
Typical Junction Capacitance per leg	$C_J$ 780pF	$V_R = 5.0V$ , $T_J = 25^\circ C$

\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

Thermal and Mechanical Characteristics		
Storage temp range	$T_{STG}$	$-55^\circ C$ to $150^\circ C$
Operating junction temp range	$T_J$	$-55^\circ C$ to $150^\circ C$
Max thermal resistance per leg	$R_{\theta JC}$	$1.8^\circ C/W$
Max thermal resistance per pkg.	$R_{\theta JC}$	$0.9^\circ C/W$
Mounting Torque		10 inch pounds maximum (4-40 screw)
Weight		.22 ounces (6.36 grams) typical

# FST3340 — FST3345

Figure 1  
Typical Forward Characteristics — Per Leg

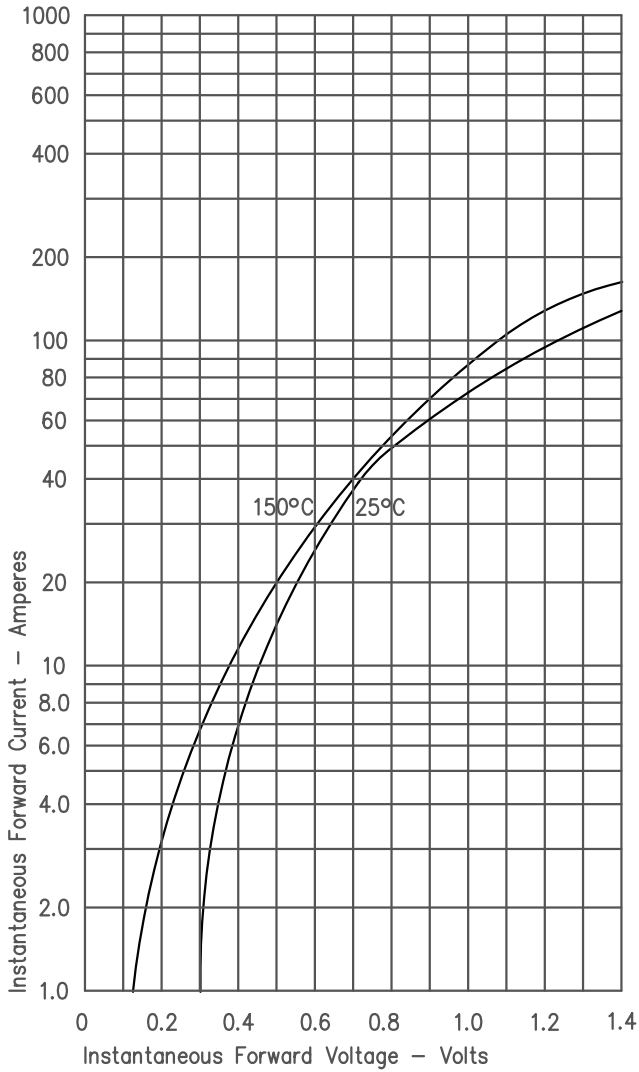


Figure 3  
Typical Junction Capacitance — Per Leg

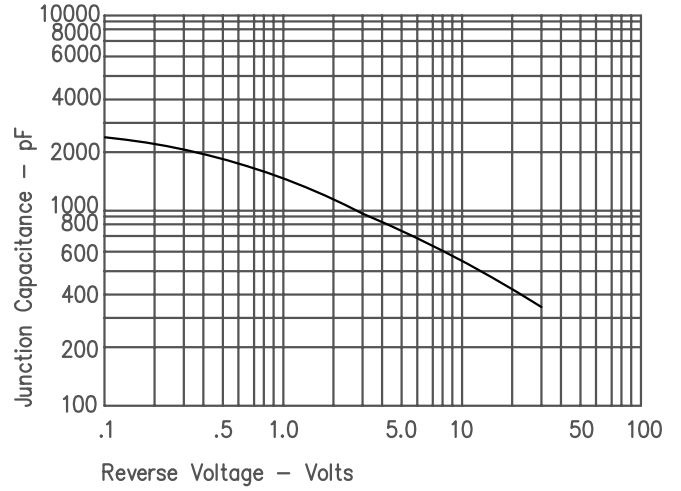


Figure 4  
Forward Current Derating — Per Leg

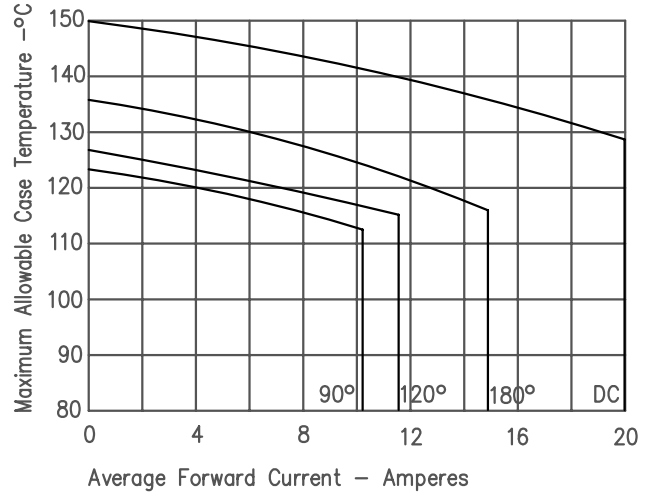


Figure 2  
Typical Reverse Characteristics — Per Leg

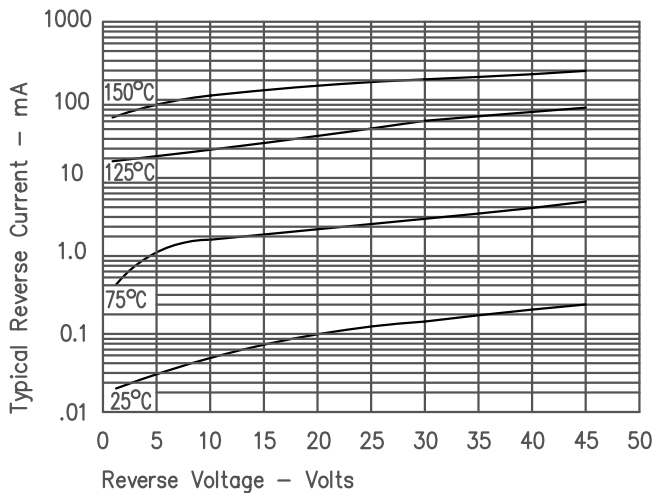


Figure 5  
Maximum Forward Power Dissipation — Per Leg

