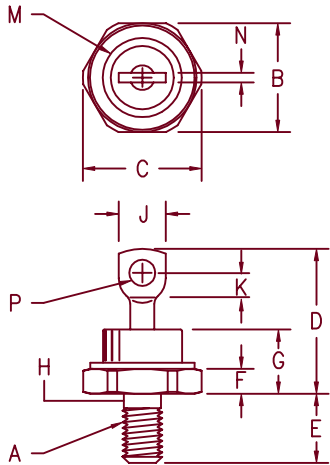


# 60 Amp Schottky Rectifier SBR6030L



- Notes:
1. Full threads within 2 1/2 threads
  2. Standard Polarity: Stud is Cathode  
Reverse Polarity: Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1/4-28
B	.669	.688	17.00	17.47	
C	---	.794	---	20.16	
D	.750	1.00	19.05	25.40	
E	.422	.453	10.72	11.50	
F	.115	.200	2.93	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.59	6.32	1
J	---	.375	---	9.52	
K	.156	---	3.97	---	
M	---	.510	---	12.95	Dia
N	---	.080	---	2.03	
P	.140	.175	3.56	4.44	Dia

## DO-203AB (DO-5)

Microsemi Catalog  
Number

SBR6030L\*

\*Add Suffix R For Reverse Polarity

Peak Reverse  
Voltage

30V

- Schottky Barrier Rectifier
- Low forward voltage
- Guard Ring Protected
- Reverse Energy Tested
- 150°C Junction Temperature
- $V_{RRM}$  30 Volts

## Electrical Characteristics

Average forward current	$I_F(AV)$ 60 Amps	$T_C = 103^\circ C$ , Square wave, $R_{\theta JC} = 1.0^\circ C/W$
Maximum surge current	$I_{FSM}$ 800 Amps	8.3ms, half sine, $T_J = 150^\circ C$
Max repetitive peak reverse current	$I_R(OV)$ 2 Amp	$f = 1$ KHz, $25^\circ C$ , 1 $\mu$ sec Square wave
Max peak forward voltage	$V_{FM}$ 0.50 Volts	$I_{FM} = 60A: 150^\circ C *$
Max peak forward voltage	$V_{FM}$ 0.55 Volts	$I_{FM} = 60A: 25^\circ C *$
Max peak reverse current	$I_{RM}$ 750 mA	$V_{RRM}, T_J = 125^\circ C *$
Max peak reverse current	$I_{RM}$ 5 mA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance per leg	$C_J$ 2400 pF	$V_R = 5.0V, T_J = 25^\circ C$

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

## Thermal and Mechanical Characteristics

Storage temp range	$T_{STG}$	$-65^\circ C$ to $175^\circ C$
Operating junction temp range	$T_J$	$-65^\circ C$ to $150^\circ C$
Max thermal resistance	$R_{\theta JC}$	$1.0^\circ C/W$ Junction to Case
Max thermal resistance (greased)	$R_{\theta CS}$	$0.5^\circ C/W$ Case to sink
Mounting torque		25-30 inch pounds
Weight		.54 ounces (15.3 grams) typical

# SBR6030L

Figure 1  
Typical Forward Characteristics

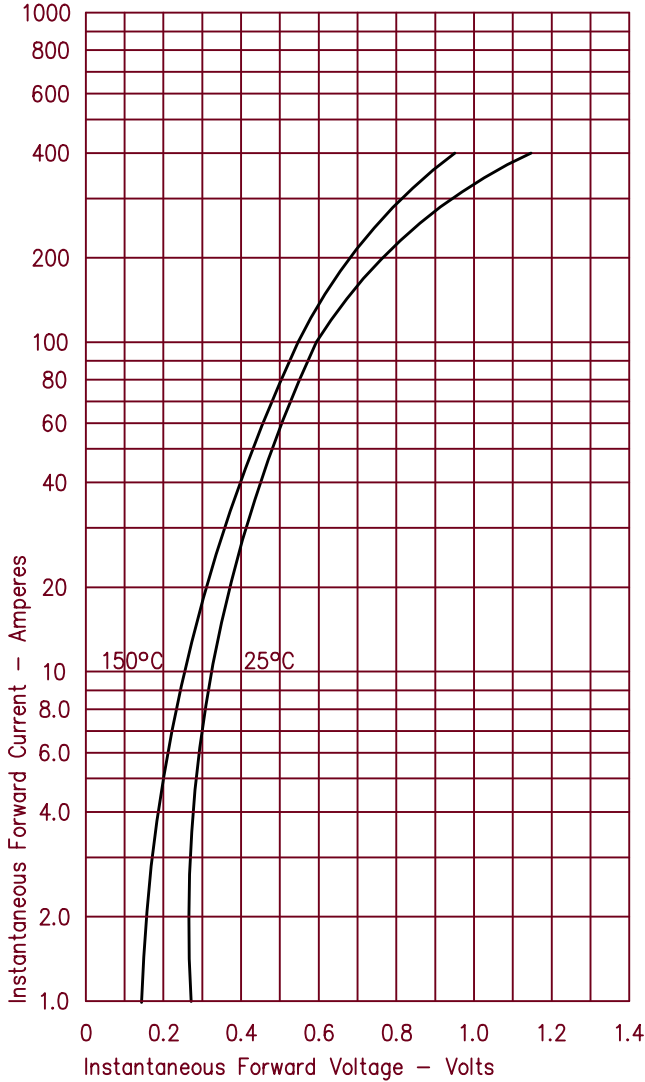


Figure 3  
Typical Junction Capacitance

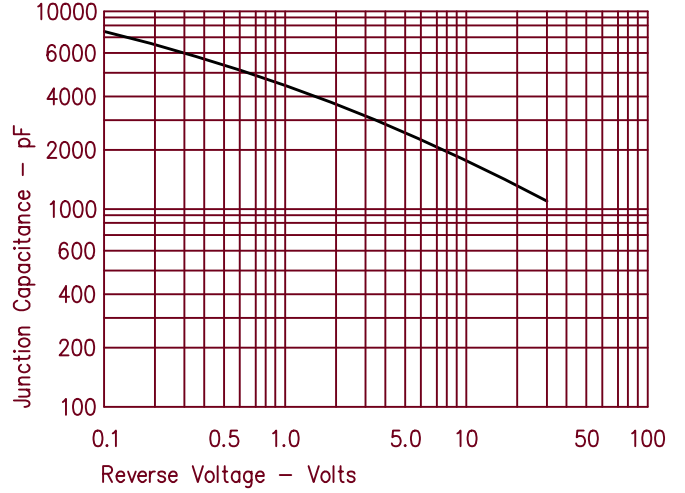


Figure 4  
Forward Current Derating

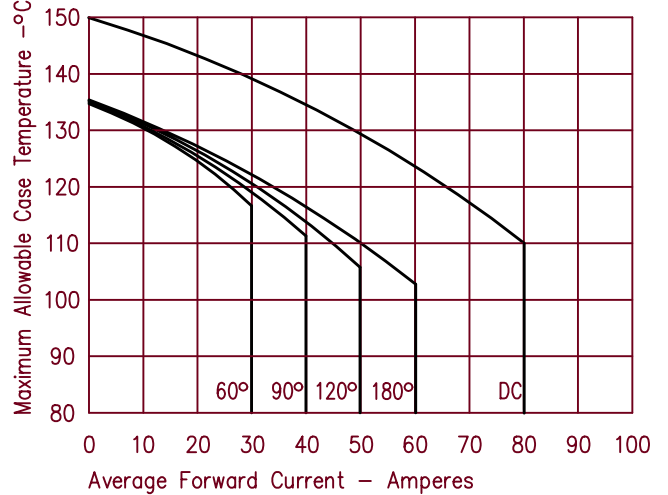


Figure 2  
Typical Reverse Characteristics

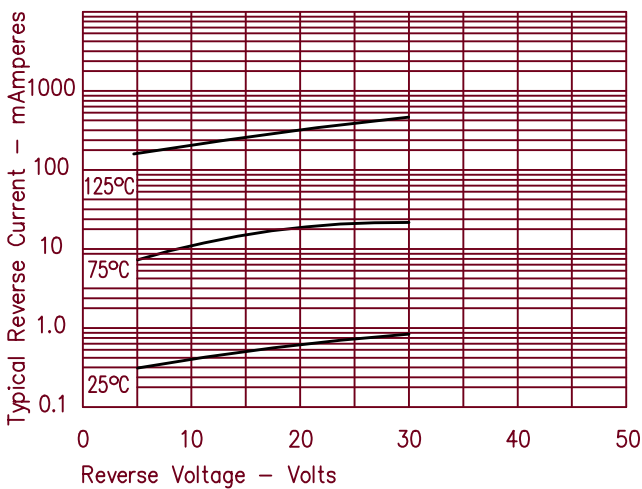


Figure 5  
Maximum Forward Power Dissipation

