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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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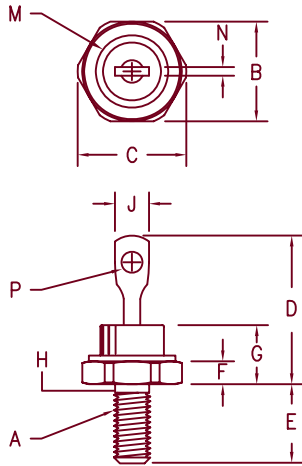
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# 30 Amp Schottky Rectifier

## SBR3035 — SBR3050



- Notes:
- 10-32 UNF3A threads
  - Full threads within 2 1/2 threads
  - Standard Polarity: Stud is Cathode. Reverse Polarity Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1
B	.424	.437	10.77	11.10	
C	---	.505	---	12.82	
D	.600	.800	15.24	20.32	
E	.422	.453	10.72	11.50	
F	.075	.175	1.91	4.44	
G	---	.405	---	10.29	
H	.163	.189	4.15	4.80	2
J	---	.250	2.54	3.56	
M	---	.350	---	8.89	Dia.
N	.020	.065	.510	1.65	
P	.070	.100	1.78	2.54	Dia.

D0203AA (D04)

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
SBR3035*	21FQ035 30FQ035	35V	35V
SBR3040*	21FQ040 30FQ040	40V	40V
SBR3045*	21FQ045 30FQ045	45V	45V
SBR3050*		50V	50V

\*Add Suffix R For Reverse Polarity

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- $V_{RRM}$  35 to 50V
- 30 Amperes
- Reverse Energy Tested

### Electrical Characteristics

Average forward current	$I_F(AV)$ 30 Amps	$T_C = 145^\circ C$ Square wave, $R_{\theta JC} = 1.5^\circ C/W$
Maximum surge current	$I_{FSM}$ 600 Amps	8.3 ms, half sine $T_J = 175^\circ C$
Max repetitive peak reverse current	$I_{R(OV)}$ 2 Amps	$f = 1$ KHz, $25^\circ C$ , 1 $\mu sec$ Square wave
Max peak forward voltage	$V_{FM}$ .49 Volts	$I_{FM} = 30A: T_J = 175^\circ C^*$
Max peak forward voltage	$V_{FM}$ .63 Volts	$I_{FM} = 30A: T_J = 25^\circ C^*$
Max peak reverse current	$I_{RM}$ 25 mA	$V_{RRM}, T_J = 125^\circ C^*$
Max peak reverse current	$I_{RM}$ 1.5 mA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 1800 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	$T_{STG}$	$-55^\circ C$ to $175^\circ C$
Operating junction temp range	$T_J$	$-55^\circ C$ to $175^\circ C$
Max thermal resistance	$R_{\theta JC}$	$1.5^\circ C/W$ Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	$0.5^\circ C/W$ Case to sink
Mounting torque		12-15 inch pounds
Weight		0.2 ounces (6.0 grams) typical



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# SBR3035 — SBR3050

Figure 1  
Typical Forward Characteristics

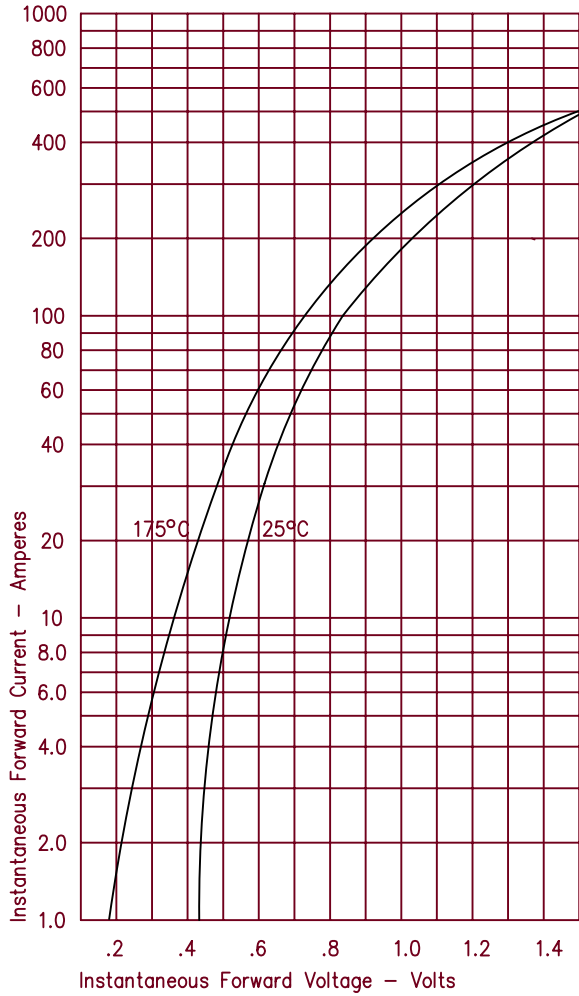


Figure 3  
Typical Junction Capacitance

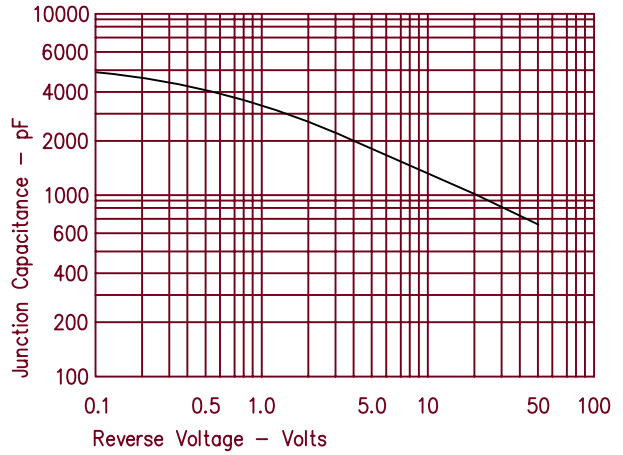


Figure 4  
Forward Current Derating

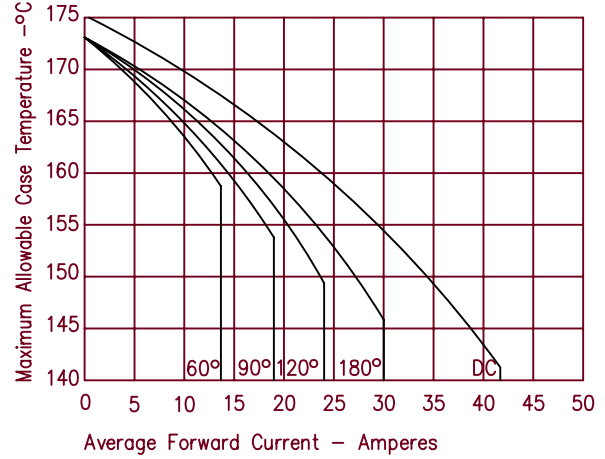


Figure 2  
Typical Reverse Characteristics

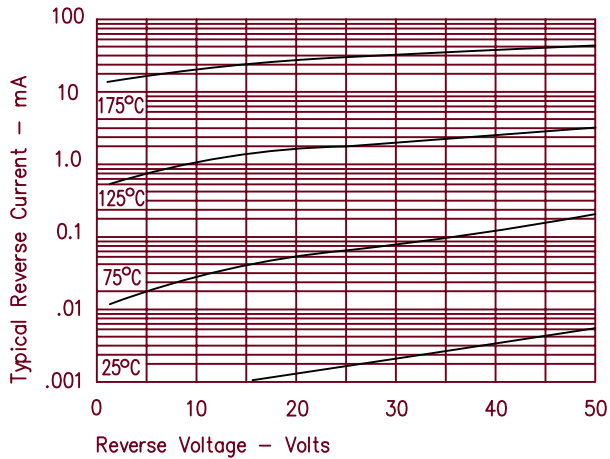


Figure 5  
Maximum Forward Power Dissipation

