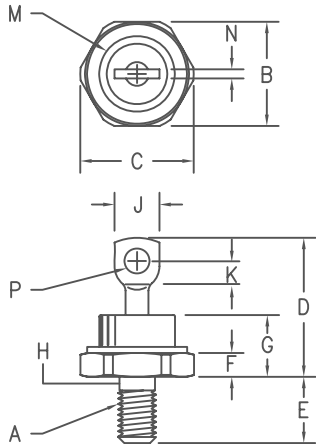


# Silicon Power Rectifier S/R34 Series



## 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	.677	.687	17.19	17.44	
C	---	.793	---	20.14	
D	---	1.00	---	25.40	
E	.427	.447	10.84	11.35	
F	.115	.200	2.92	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.59	6.32	1
J	---	.375	---	9.52	
K	.156	---	3.97	---	
M	---	.667	---	16.94	Dia
N	---	.080	---	2.03	
P	.140	.175	3.56	4.44	Dia

D0203AB (D05)

Microsemi  
Catalog Number  
Standard

\*S3410  
\*S3420  
\*S3440  
\*S3460  
\*S3480  
\*S34100  
\*S34120  
\*S34140  
\*S34160

Peak Reverse  
Voltage

100V  
200V  
400V  
600V  
800V  
1000V  
1200V  
1400V  
1600V

\*Change S to R in part number for Reverse Polarity

- Glass Passivated Die
- 800A surge rating
- Glass to metal seal construction
- $V_{RRM}$  to 1600V
- Low cost Non-RoHS package

## Electrical Characteristics

Average forward current	$I_F(AV)$ 45 Amps	$T_C = 123^\circ C$ , half sine wave, $R_{\theta JC} = 1.75^\circ C/W$
Maximum surge current	$I_{FSM}$ 800 Amps	8.3ms, half sine, $T_J = 200^\circ C$
Max $I^2 t$ for fusing	$I^2 t$ 2600 $A^2 s$	
Max peak forward voltage	$V_{FM}$ 1.15 Volts	$I_{FM} = 90A; T_J = 25^\circ C$ *
Max peak reverse current	$I_{RM}$ 10 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Max peak reverse current	$I_{RM}$ 2.0 mA	$V_{RRM}, T_J = 150^\circ C$
Max Recommended Operating Frequency	10kHz	

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

## Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	$-65^\circ C$ to $200^\circ C$
Operating junction temp range	$T_J$	$-65^\circ C$ to $200^\circ C$
Maximum thermal resistance	$R_{\theta JC}$	1.75 $^\circ C/W$ Junction to Case
Mounting torque		25-30 inch pounds
Weight		.5 ounces (14 grams) typical

# S/R34

Figure 1  
Typical Forward Characteristics

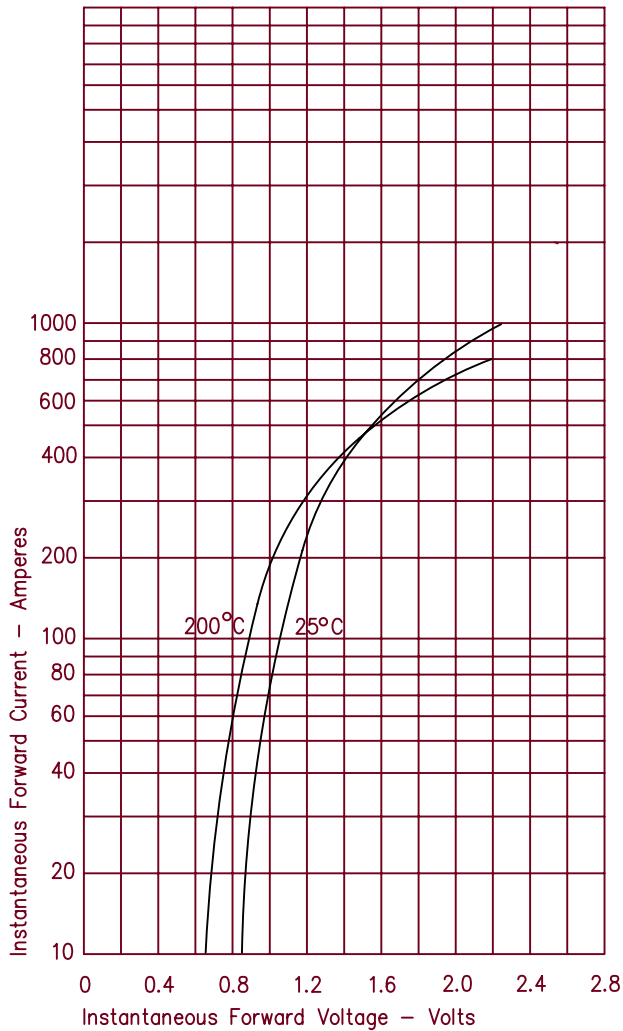


Figure 3  
Forward Current Derating

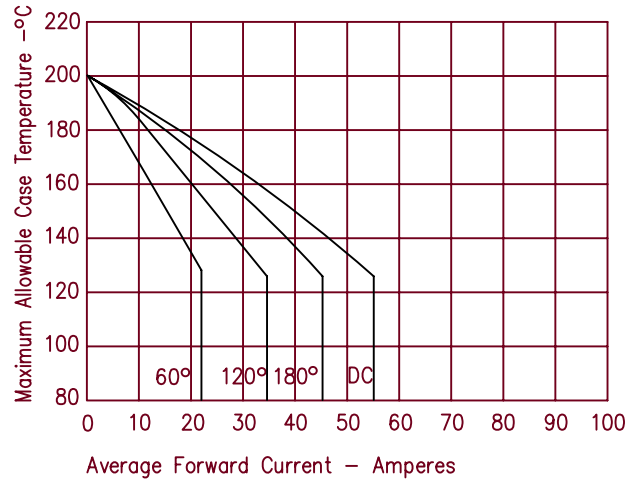


Figure 4  
Maximum Forward Power Dissipation

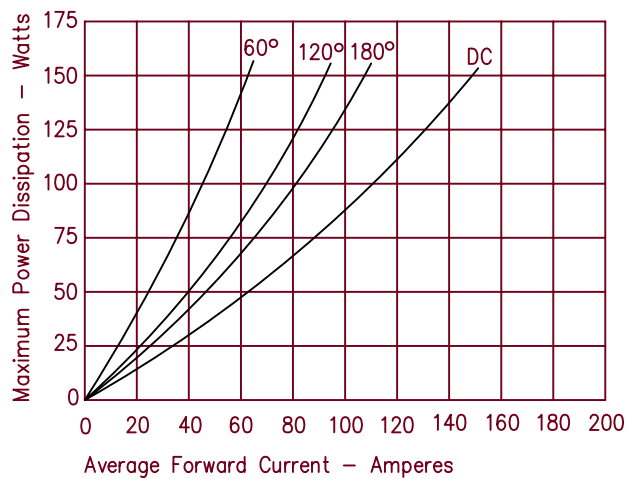


Figure 2  
Typical Reverse Characteristics

