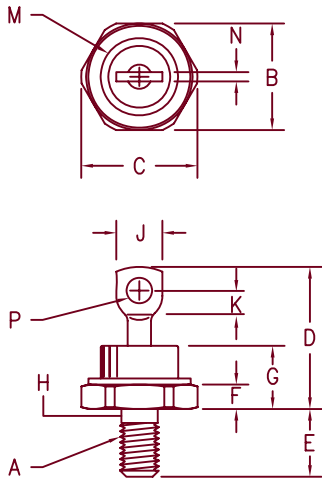


# Silicon Power Rectifier S/R36 Series



- Notes:
- 1/4-28
  - 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	.667	.687	16.95	17.44	
C	---	.793	---	20.14	
D	---	1.00	---	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	2
J	.250	.375	6.35	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		Peak Reverse Voltage
Standard	Reverse	
S3610	R3610	100V
S3620	R3620	200V
S3640	R3640	400V
S3660	R3660	600V
S3680	R3680	800V
S36100	R36100	1000V
S36120	R36120	1200V
S36140	R36140	1400V
S36160	R36160	1600V

- Low thermal resistance
- Glass Passivated Die
- 1200 Amps Surge Rating
- Glass to metal seal construction
- VRRM to 1600V

## Electrical Characteristics

Average forward current	$I_F(AV)$ 70 Amps	$T_C = 151^\circ C$ , Half Sine Wave, $R_{\theta JC} = 0.65^\circ C/W$
Maximum surge current	$I_{FSM}$ 1200 Amps	8.3ms, half sine, $T_J = 200^\circ C$
Max $I^2 t$ for fusing	$I^2 t$ 6000 $A^2 s$	
Max peak forward voltage	$V_{FM}$ 1.25 Volts	$I_{FM} = 200A; T_J = 25^\circ C^*$
Max peak reverse current	$I_{RM}$ 25 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
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	$R_{\theta JC}$	0.65 $^\circ C/W$ Junction to Case
Mounting torque		25-30 inch pounds
Weight		.6 ounces (17 grams) typical



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05-02-07 Rev. 2

# S/R36

Figure 1  
Typical Forward Characteristics

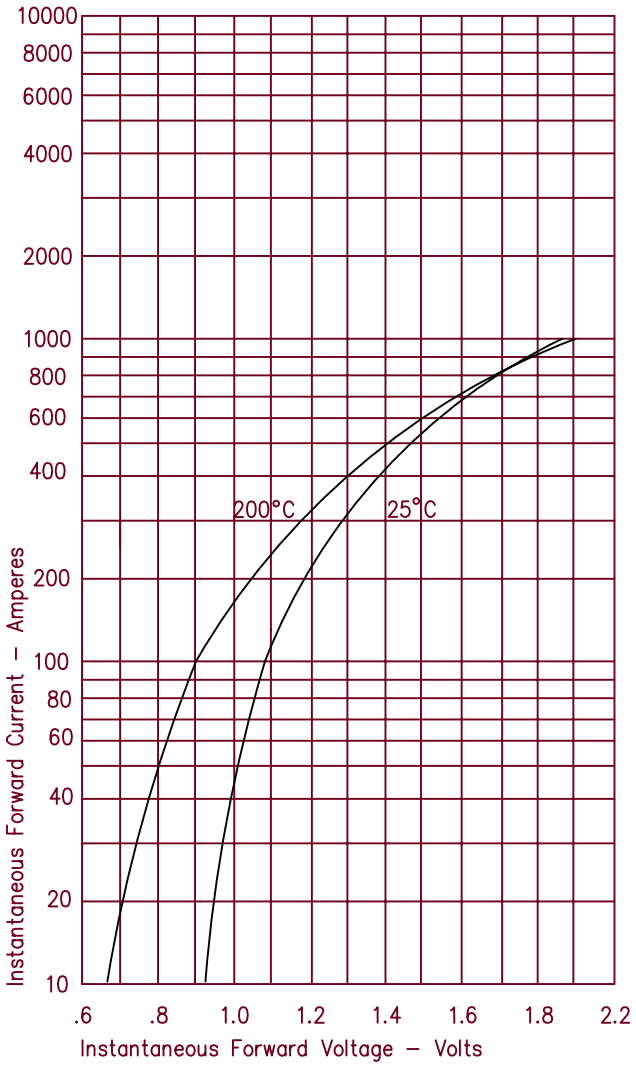


Figure 3  
Forward Current Derating

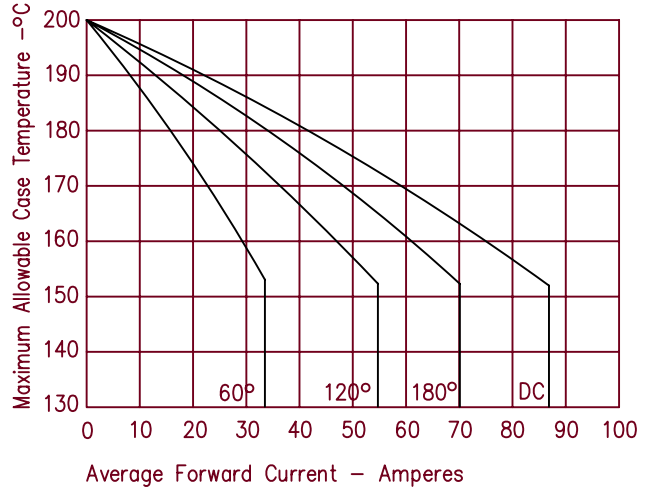


Figure 4  
Maximum Forward Power Dissipation

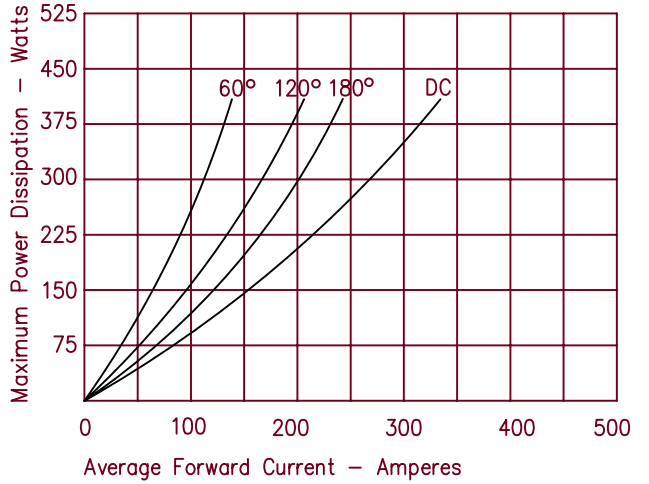


Figure 2  
Typical Reverse Characteristics

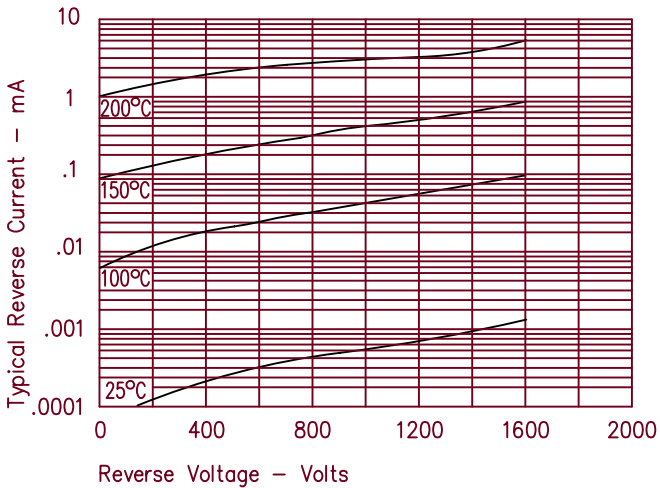


Figure 5  
Transient Thermal Impedance

