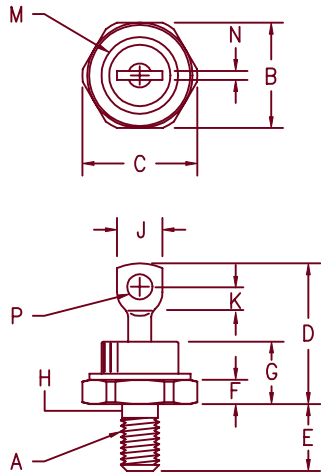


Silicon Power Rectifier S/R36 Series



- 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	Standard	Reverse	Peak Reverse Voltage
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	IF(AV) 70 Amps	TC = 151°C, Half Sine Wave, RθJC = 0.65°C/W 8.3ms, half sine, TJ = 200°C
Maximum surge current	IFSM 1200 Amps	
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; TJ = 25°C*
Max peak reverse current	I _{RM} 25 μA	V _{RRM} , TJ = 25°C
Max peak reverse current	I _{RM} 2.0 mA	V _{RRM} , TJ = 150°C*
Max Recommended Operating Frequency	10kHz	

*Pulse test: Pulse width 300 μsec. Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	T _{STG}	-65°C to 200°C
Operating junction temp range	T _J	-65°C to 200°C
Maximum thermal resistance	R _{θJC}	0.65°C/W Junction to Case
Mounting torque		25-30 inch pounds
Weight		.6 ounces (17 grams) typical

12-14-00 Rev. 1

S/R36

Figure 1
Typical Forward Characteristics

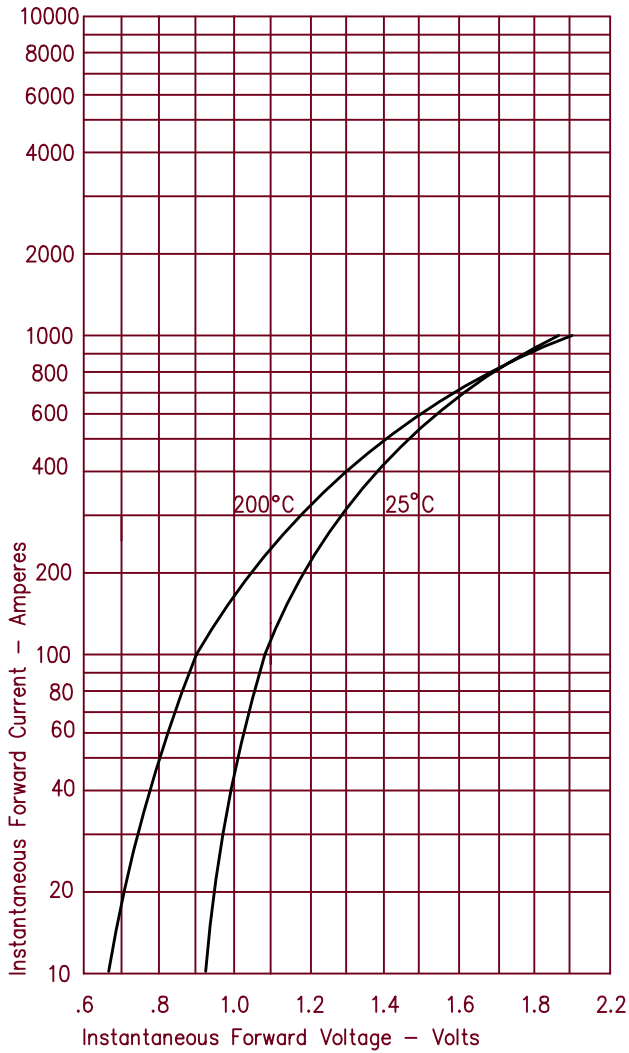


Figure 3
Forward Current Derating

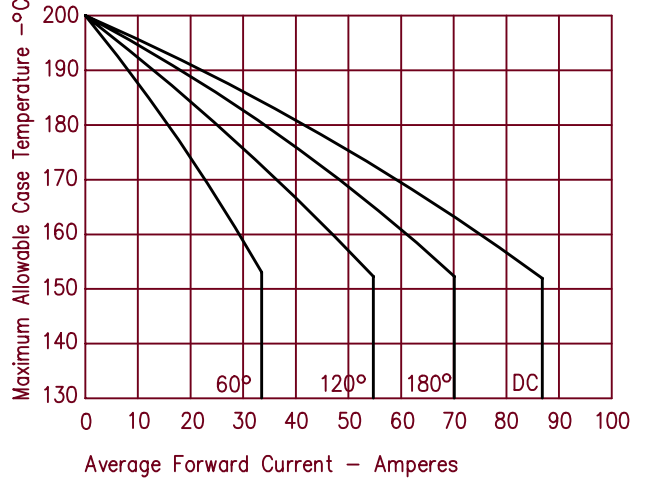


Figure 4
Maximum Forward Power Dissipation

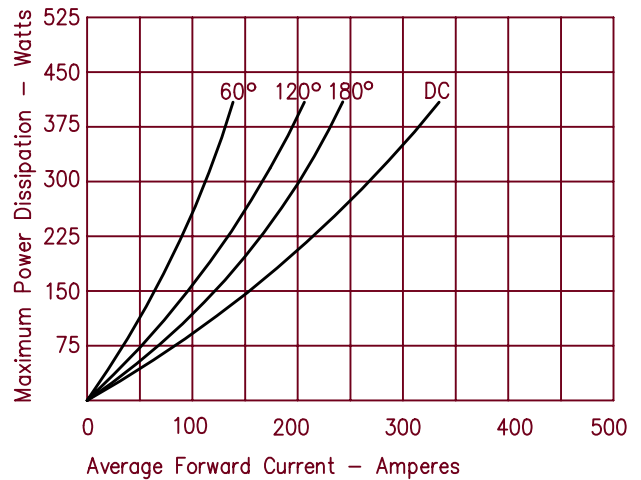


Figure 2
Typical Reverse Characteristics

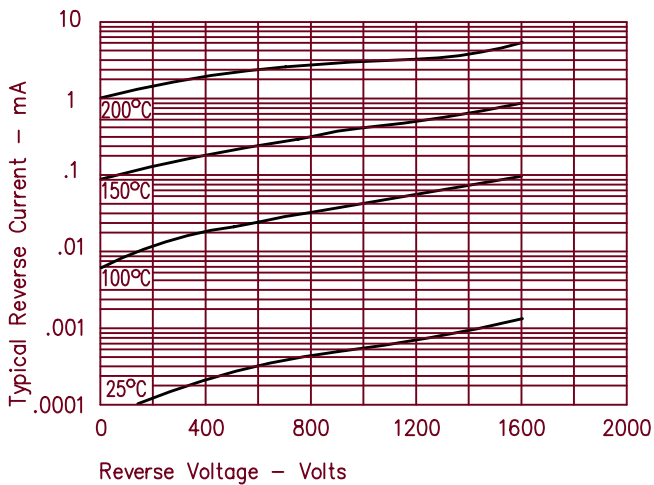


Figure 5
Transient Thermal Impedance

