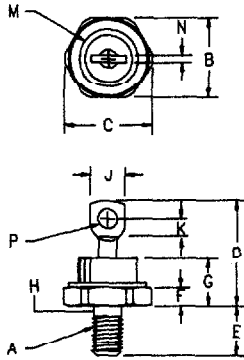


Silicon Power Rectifier S/R36 Series



- 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	2.95	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.59	6.32	2
J	.250	.375	6.35	9.52	
K	.166	---	3.97	---	
M	---	.667	---	16.94	Dia
N	---	.080	---	2.03	
P	.140	.175	3.56	4.44	Dia

D0203AB (D05)

E

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

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

Electrical Characteristics		
Average forward current	IF(AV) 70 Amps	Tc = 151°C, Half Sine Wave, RθJC = 0.65°C/W
Maximum surge current	IFSM 1200 Amps	8.3ms, half sine, Tj = 200°C
Max I ² t for fusing	I ² t 6000 A ² s	
Max peak forward voltage	VFM 1.25 Volts	IFM = 200A; Tj = 25°C*
Max peak reverse current	IRM 50 μA	VRRM, Tj = 25°C
Max peak reverse current	IRM 2.0 mA	VRRM, Tj = 150°C*
Max Recommended Operating Frequency	10kHz	
*Pulse test: Pulse width 300 μsec. Duty cycle 2%		

Thermal and Mechanical Characteristics		
Storage temperature range	TSTG	-85°C to 200°C
Operating junction temp range	TJ	-65°C to 200°C
Maximum thermal resistance	RθJC	0.65°C/W Junction to Case
Typical thermal resistance	RθJC	0.6°C/W Junction to Case
Mounting torque		30 inch pounds maximum
Weight		.6 ounces (17 grams) typical

Microsemi Corp.
Colorado

PH: 303-469-2161
FAX: 303-466-3775

R-29

S/R36

Figure 1
Typical Forward Characteristics

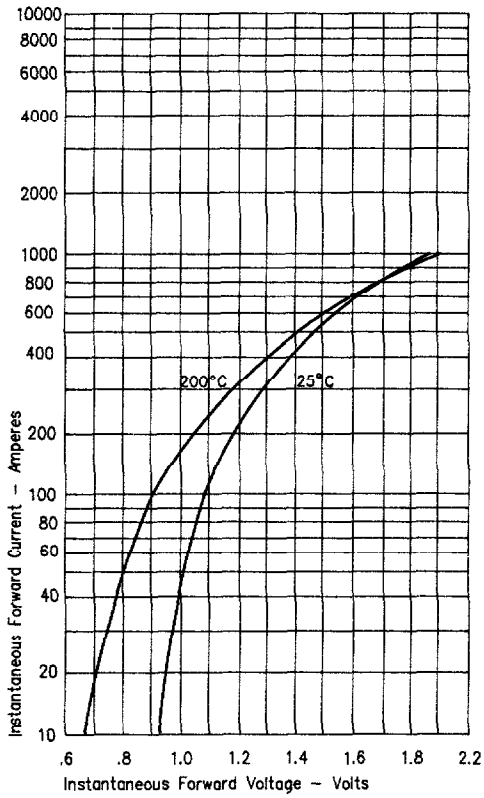


Figure 3
Forward Current Derating

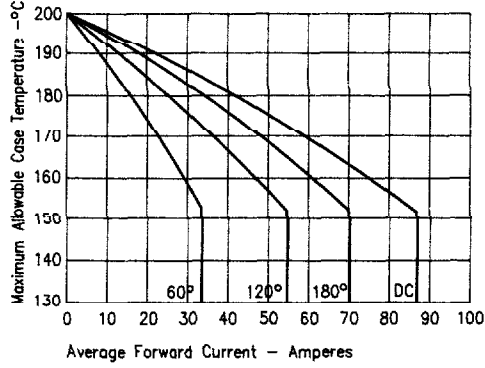


Figure 4
Maximum Forward Power Dissipation

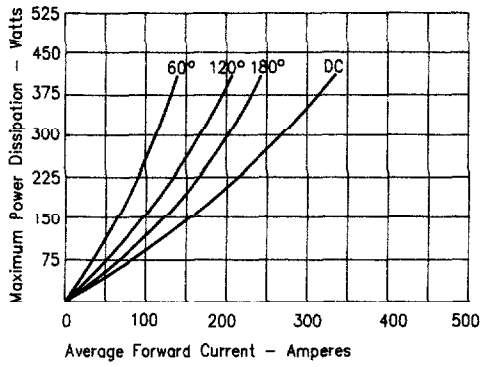


Figure 2
Typical Reverse Characteristics

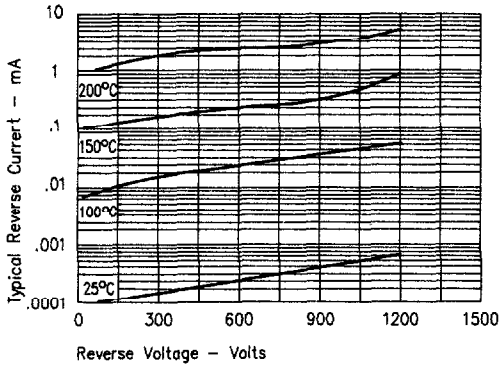
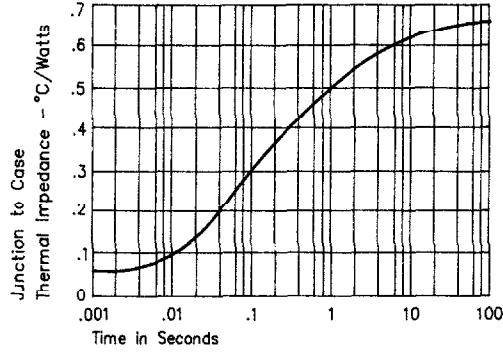
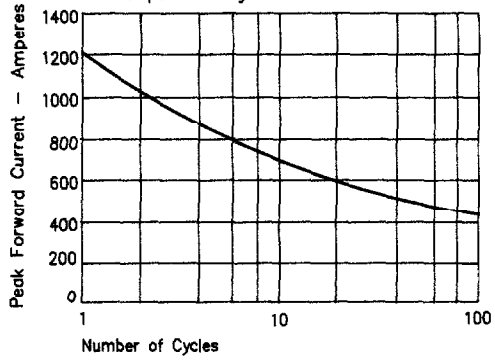


Figure 5
Transient Thermal Impedance



S/R36

Figure 6
Maximum Nonrepetitive Surge Current



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