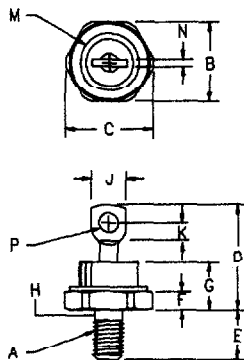


Silicon Power Rectifier S/R36 Series



Notes:

1. 1/4-28
2. Full threads within 2 1/2 threads
3. 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
S3620	R3620
S3640	R3640
S3660	R3660
S3680	R3680
S36100	R36100
S36120	R36120

100V
200V
400V
600V
800V
1000V
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	T _C = 151°C, Half Sine Wave, R _{θJC} = 0.65°C/W
Maximum surge current	IFSM 1200 Amps	8.3ms, half sine, T _J = 200°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°C*
Max peak reverse current	I _{RM} 50 μA	V _{RRM} , T _J = 25°C
Max peak reverse current	I _{RM} 2.0 mA	V _{RRM} , T _J = 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
Typical thermal resistance	R _{θJC}	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

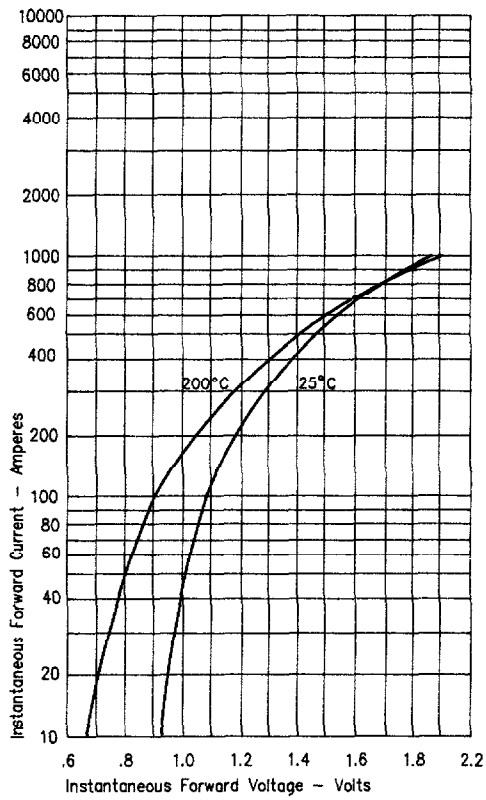


Figure 2
Typical Reverse Characteristics

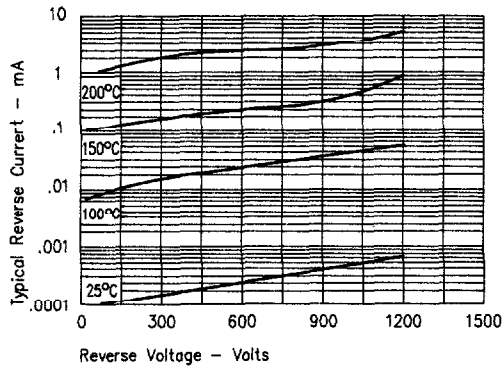


Figure 3
Forward Current Derating

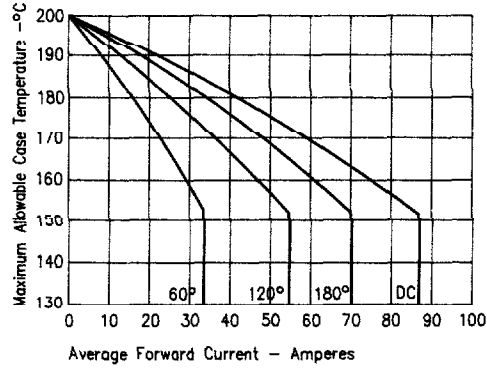


Figure 4
Maximum Forward Power Dissipation

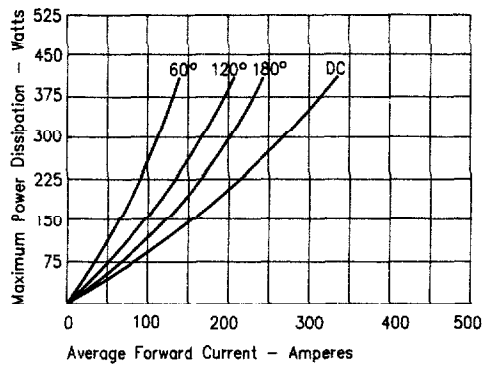
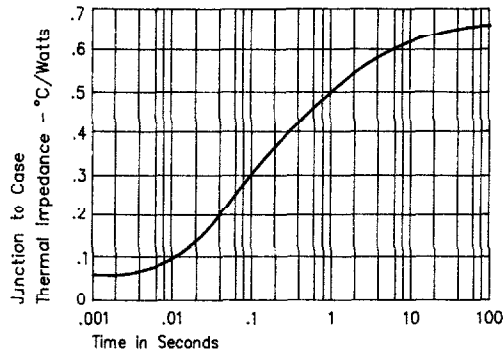
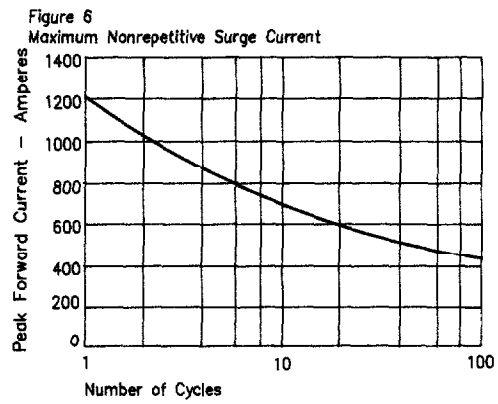


Figure 5
Transient Thermal Impedance



S/R36



E