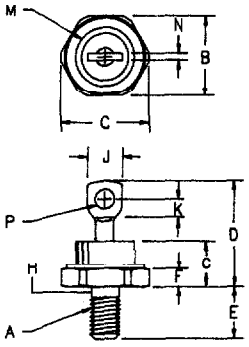
Silicon Power Rectifier
S/R35



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		
	Minimum	Maximum	Minimum	Maximum	Notes
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

DO203AB (DO5)

Microsemi Catalog Number Standard	Reverse	Peak Reverse Voltage
S3520	R3520	200V
S3540	R3540	400V
S3560	R3560	600V
S3580	R3580	800V
S35100	R35100	1000V
S35120	R35120	1200V
S35140	R35140	1400V
R35160	R35160	1600V

- Low Forward Voltage
- Glass to Metal Construction
- Glass Passivated Die
- Excellent Reliability
- V_{RRM} to 1600V
- 1050 Amps Surge Rating

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 70 Amps	T_C = 152°C, Half Sine Wave, $R_{\theta JC}$ = 0.65°C/W
Maximum surge current	I_{FSM} 1050 Amps	8.3ms, half sine, T_J = 200°C
Max I^2t for fusing	I^2t 4500 A^2s	
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} 3.0 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	$R_{\theta JC}$	0.65°C/W Junction to Case
Typical thermal resistance	$R_{\theta JC}$	0.55°C/W Junction to Case
Mounting torque		30 inch pounds maximum
Weight		.5 ounces (14 grams) typical

Microsemi Corp. Colorado

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S/R35

Figure 1
Typical Forward Characteristics

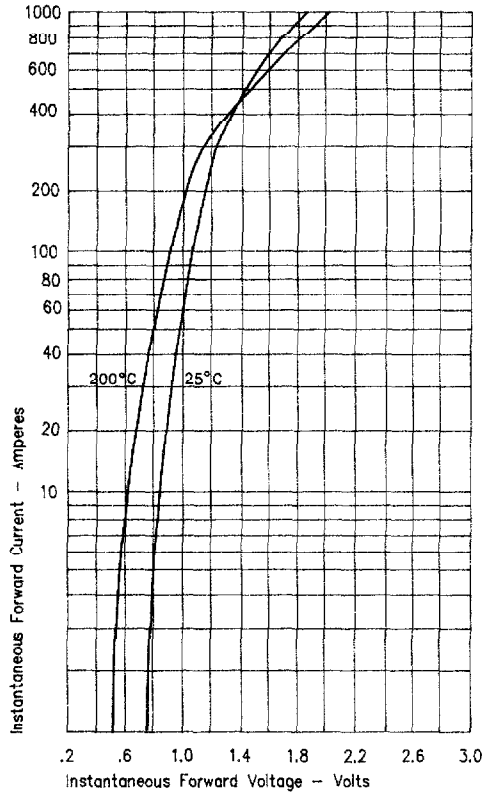


Figure 2
Typical Reverse Characteristics

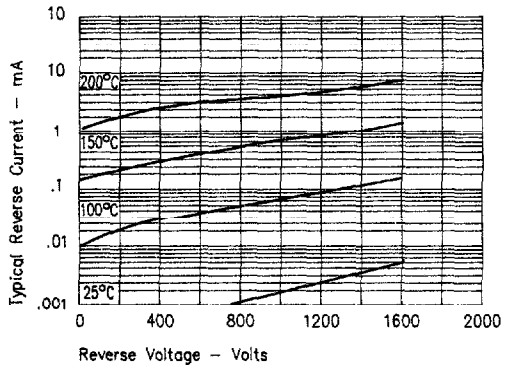


Figure 3
Forward Current Derating

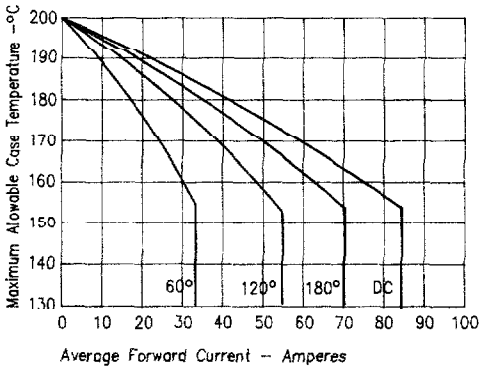


Figure 4
Maximum Forward Power Dissipation

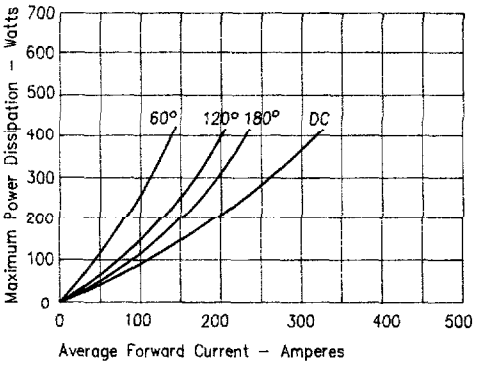
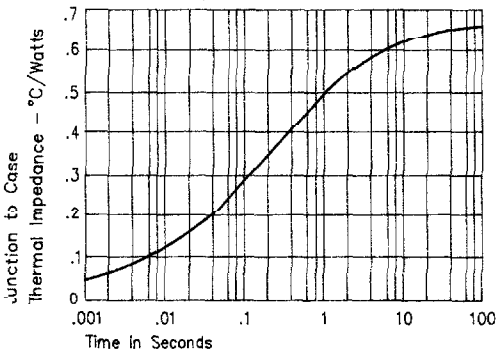


Figure 5
Transient Thermal Impedance



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S/R35

Figure 6
Maximum Nonrepetitive Surge Current