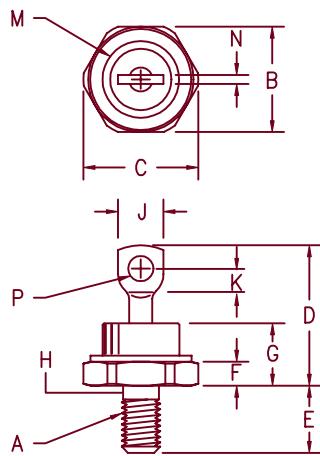


Silicon Power Rectifier S/R307 Series



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
S30720	R30720
S30740	R30740
S30760	R30760

Peak Reverse	Voltage
	200V
	400V
	600V

- Glass Passivated Die
- 1500 Amps Surge Rating
- Glass to metal seal construction
- VRM to 600V

Electrical Characteristics

Average forward current	I _{F(AV)} 85 Amps
Maximum surge current	I _{FSM} 1500 Amps
Max I ² t for fusing	I ² t 9300 A ² s
Max peak forward voltage	V _{FM} 1.1 Volts
Max peak reverse current	I _{RM} 25 μA
Max peak reverse current	I _{RM} 4.0 mA
Max Recommended Operating Frequency	10kHz

T _C = 136°C, Half Sine Wave, R _{θJC} = 0.8°C/W
8.3ms, half sine, T _J = 200°C
I _{FM} = 200A; T _J = 25°C*
V _{RRM,TJ} = 25°C
V _{RRM,TJ} = 150°C

*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}	0.8°C/W Junction to Case
Mounting torque		25-30 inch pounds
Weight		.6 ounces (17 grams) typical

12-5-00 Rev. 1

S/R 307

Figure 1
Typical Forward Characteristics

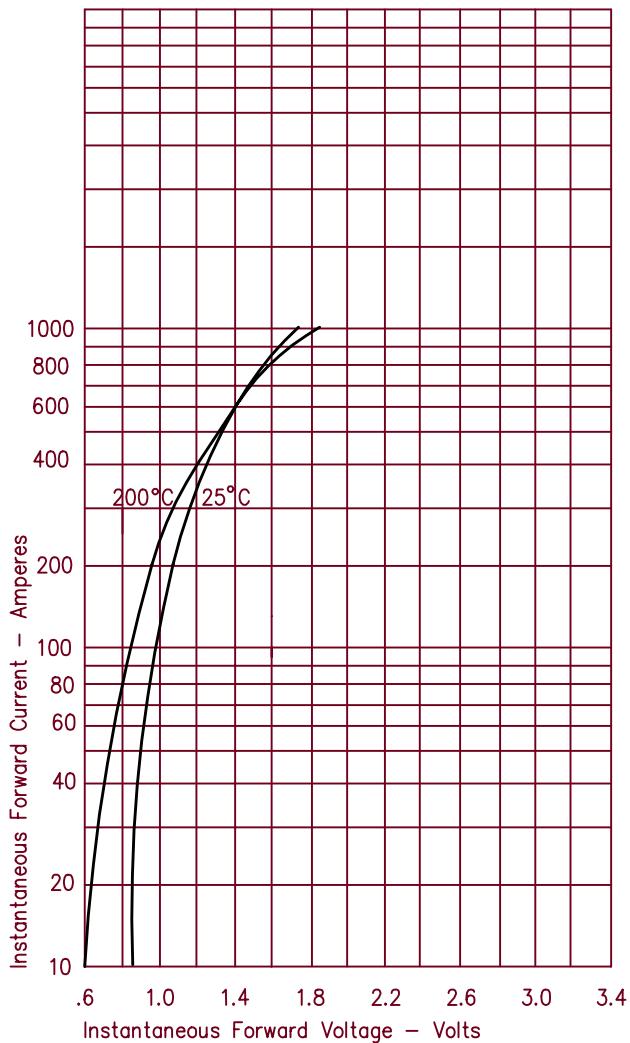


Figure 2
Typical Reverse Characteristics

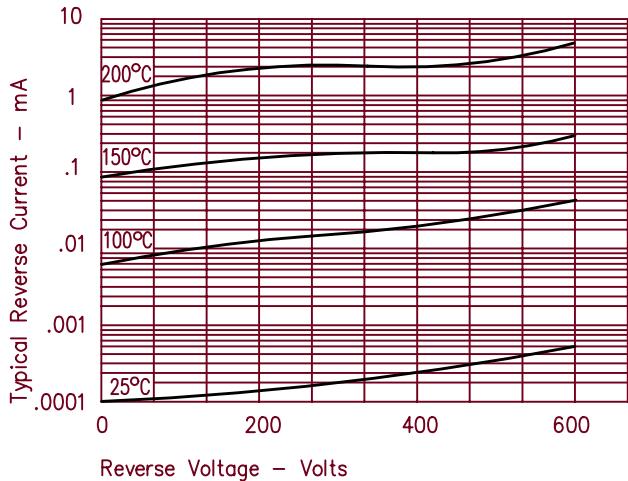


Figure 3
Forward Current Derating

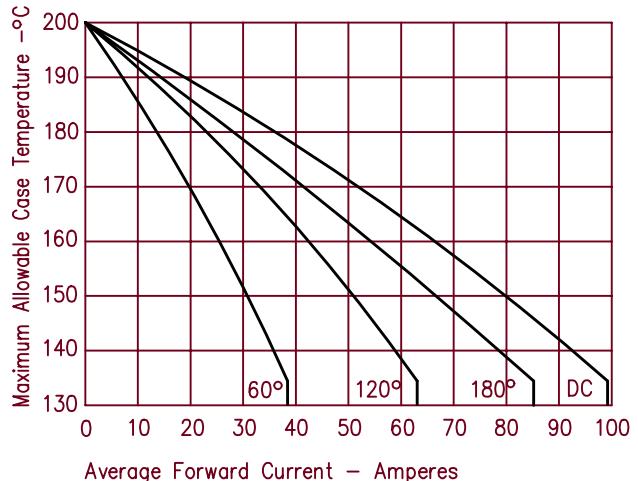


Figure 4
Maximum Forward Power Dissipation

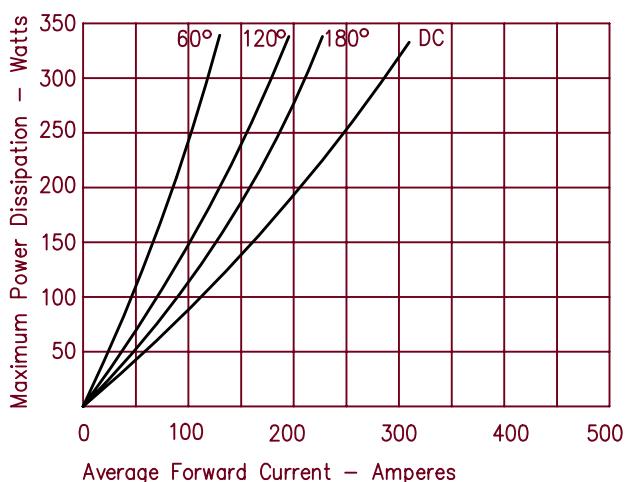


Figure 5
Transient Thermal Impedance

