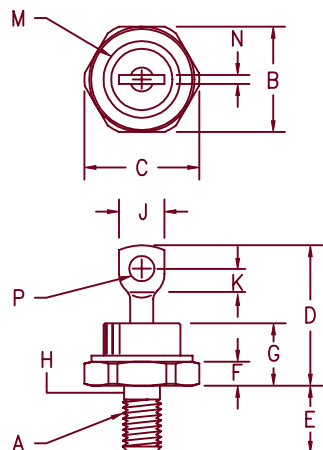


Silicon Power Rectifier

S/R34 Series



Notes:

1. Full threads within 2 1/2 threads
2. Standard Polarity: Stud is Cathode
Reverse Polarity: Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1/4-28
B	.677	.687	17.19	17.44	
C	---	.793	---	20.14	
D	---	1.00	---	25.40	
E	.427	.447	10.84	11.35	1
F	.115	.200	2.92	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.59	6.32	
J	---	.375	---	9.52	Dia
K	.156	---	3.97	---	
M	---	.667	---	16.94	
N	---	.080	---	2.03	
P	.140	.175	3.56	4.44	Dia

D0203AB (D05)

Microsemi
Catalog Number
Standard

*S3410
*S3420
*S3440
*S3460
*S3480
*S34100
*S34120
*S34140
*S34160

Peak Reverse
Voltage

100V
200V
400V
600V
800V
1000V
1200V
1400V
1600V

*Change S to R in part number for Reverse Polarity

- Glass Passivated Die
- 800A surge rating
- Glass to metal seal construction
- V_{RRM} to 1600V

Electrical Characteristics

Average forward current $I_F(AV)$ 45 Amps
Maximum surge current I_{FSM} 800 Amps
Max $I^2 t$ for fusing $I^2 t$ 2600 A²s
Max peak forward voltage V_{FM} 1.15 Volts
Max peak reverse current I_{RM} 10 μ A
Max peak reverse current I_{RM} 2.0 mA
Max Recommended Operating Frequency 10kHz

$T_C = 123^\circ\text{C}$, half sine wave, $R_{\theta JC} = 1.75^\circ\text{C/W}$
8.3ms, half sine, $T_J = 200^\circ\text{C}$

$I_{FM} = 90A$; $T_J = 25^\circ\text{C}$ *
 V_{RRM} ; $T_J = 25^\circ\text{C}$
 V_{RRM} ; $T_J = 150^\circ\text{C}$

*Pulse test: Pulse width 300 μ sec. Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range
Operating junction temp range
Maximum thermal resistance
Mounting torque
Weight

T_{STG}
 T_J
 $R_{\theta JC}$

-65°C to 200°C
 -65°C to 200°C
1.75 $^\circ\text{C/W}$ Junction to Case
25-30 inch pounds
.5 ounces (14 grams) typical

12-5-00 Rev. 1

S/R34

Figure 1
Typical Forward Characteristics

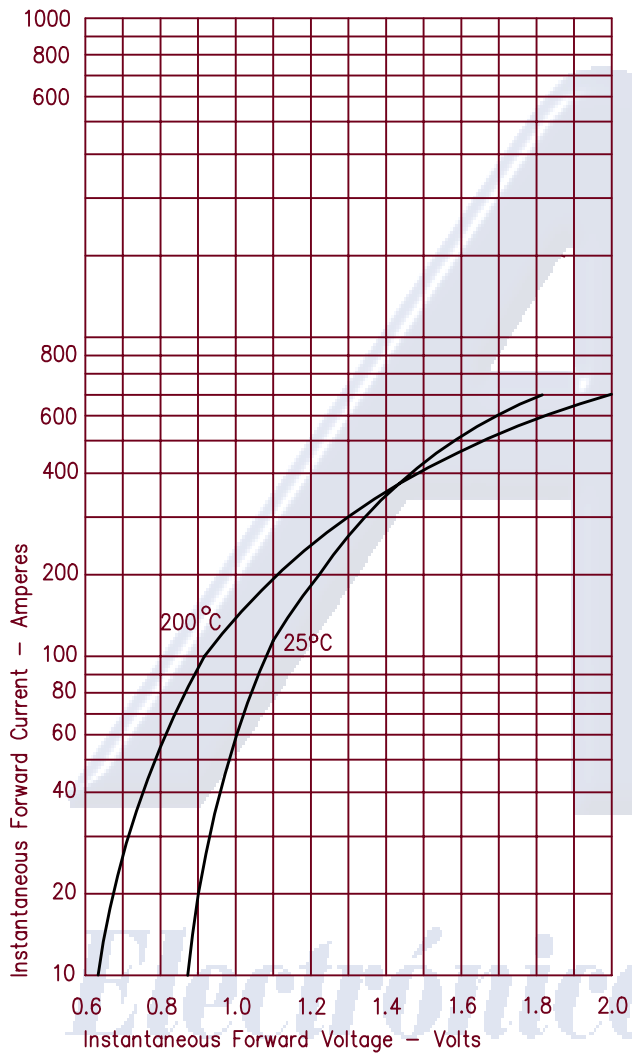


Figure 3
Forward Current Derating

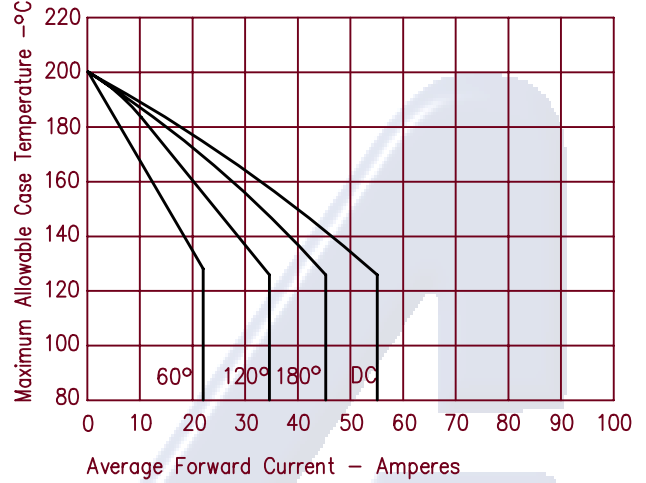


Figure 4
Maximum Forward Power Dissipation

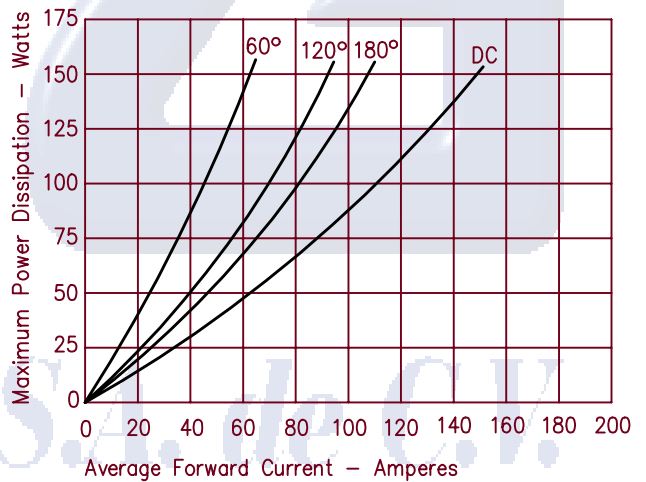


Figure 2
Typical Reverse Characteristics

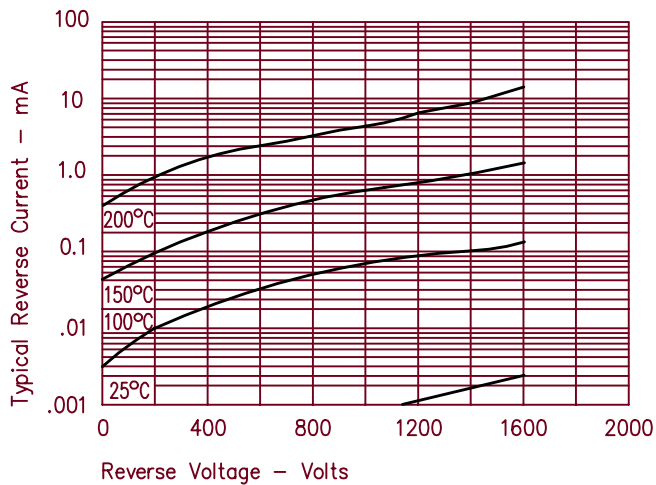


Figure 5
Transient Thermal Impedance

