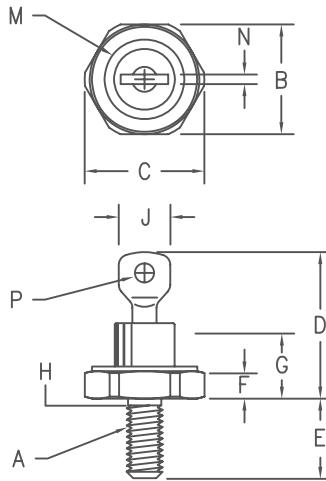


Silicon Power Rectifier S/R204 Series



Notes:

1. 10-32 UNF3A
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	.424	.437	10.77	11.10	
C	---	.505	---	12.82	
D	.600	.800	15.24	20.32	
E	.422	.453	10.72	11.50	
F	.075	.175	1.91	4.44	
G	---	.405	---	10.29	
H	.163	.189	4.15	4.80	2
J	---	.310	---	7.87	
M	---	.350	---	8.89	Dia
N	.020	.065	.510	1.65	
P	.070	.100	1.78	2.54	Dia

DO203AA (D04)

Microsemi Catalog Number	JEDEC Numbers	Peak Reverse Voltage
Standard	1N1199, 1N1199A, 1N1199B	50V
*S20410	1N1200, 1N1200A, 1N1200B	100V
	1N1201, 1N1201A, 1N1201B	150V
*S20420	1N1124,A, 1N1202, 1N1202A, 1N1202B	200V
	1N1125,A, 1N1203, 1N1203A, 1N1203B	300V
*S20440	1N1126,A, 1N1204, 1N1204A, 1N1204B	400V
	1N1127,A, 1N1205, 1N1205A, 1N1205B	500V
*S20460	1N1128,A, 1N1206, 1N1206A, 1N1206B	600V
*S20480		800V
*S204100		1000V
*S204120		1200V

*Change S to R in part number for Reverse Polarity
For JEDEC numbers add R to part number for Reverse
Polarity NOTE: The Reverse Polarity For the A & B versions
may be listed as RA or RB instead of AR or BR

- Glass Passivated Die
- Low Forward Voltage
- 250A Surge Rating
- Glass to metal seal construction
- V_{RRM} to 1200V
- Low cost Non-RoHS package

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 12 Amps
Maximum surge current	I_{FSM} 250 Amps
Max I^2t for fusing	I^2t 260 A ² s
Max peak forward voltage	V_{FM} 1.2 Volts
Max peak reverse current	I_{RM} 10 μ A
Max peak reverse current	I_{RM} 1.0 mA
Max Recommended Operating Frequency	10kHz

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

T_C = 170°C, half sine wave, $R_{\theta JC}$ = 2.5°C/W
8.3ms, half sine, T_J = 200°C

I_{FM} = 30A; T_J = 25°C *

V_{RRM}, T_J = 25°C

V_{RRM}, T_J = 150°C *

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	$R_{\theta JC}$	2.5°C/W Junction to Case
Mounting torque		25-30 inch pounds
Weight		.16 ounces (5.0 grams) typical

Figure 1
Typical Forward Characteristics

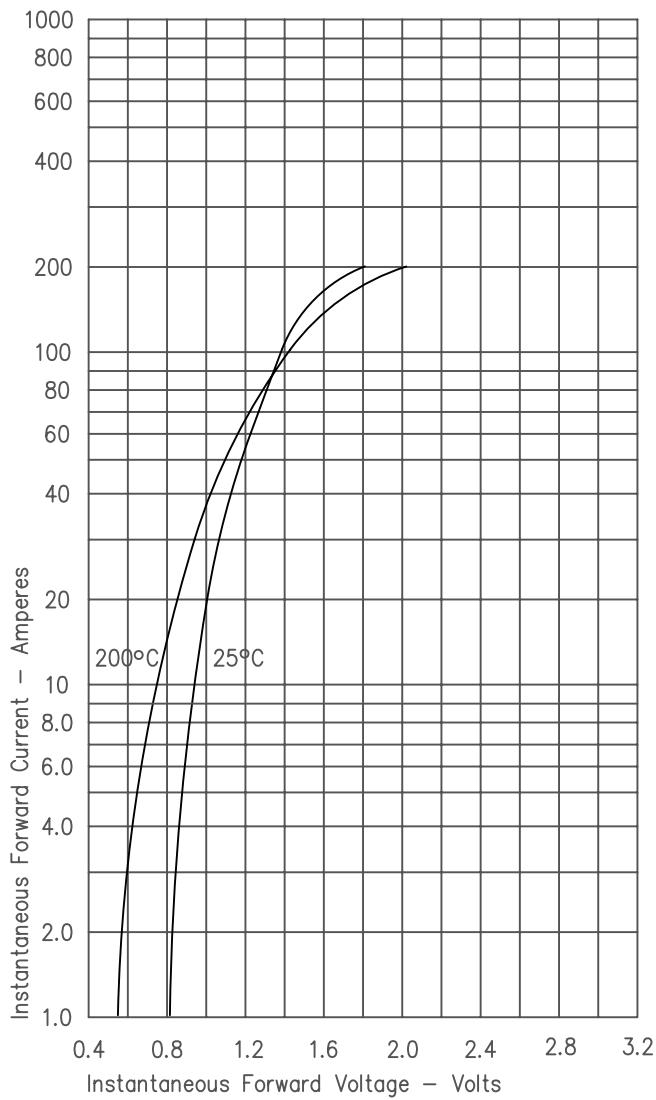


Figure 2
Typical Reverse Characteristics

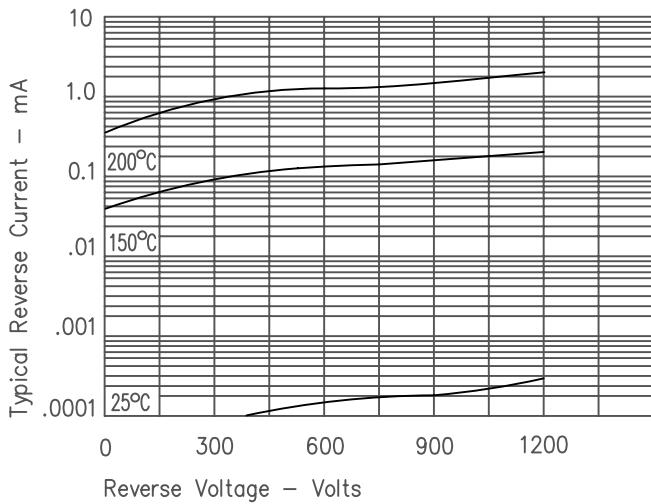


Figure 3
Forward Current Derating

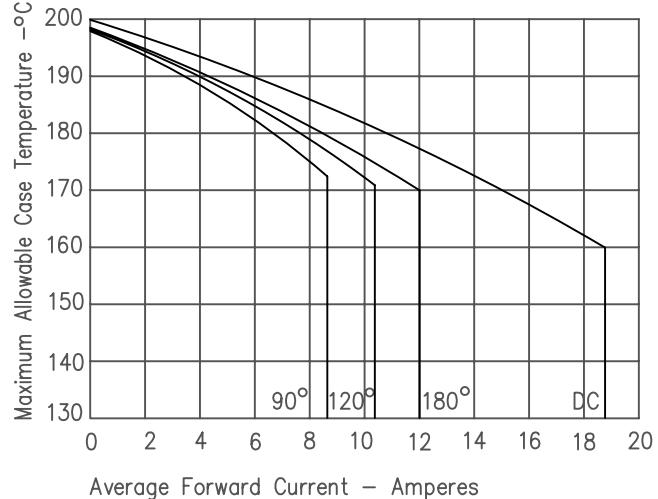


Figure 4
Maximum Forward Power Dissipation

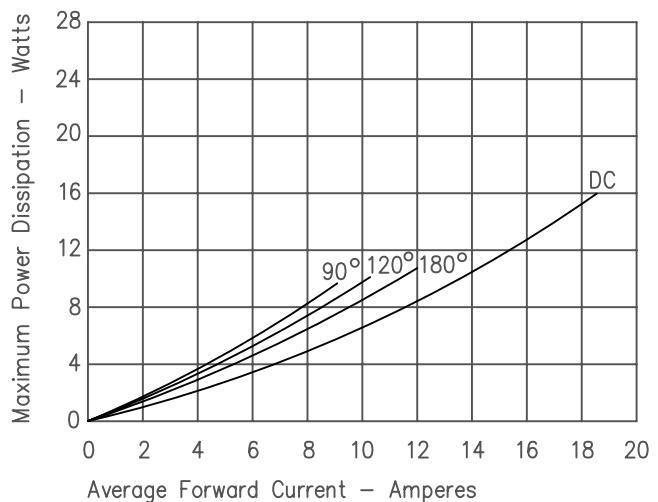
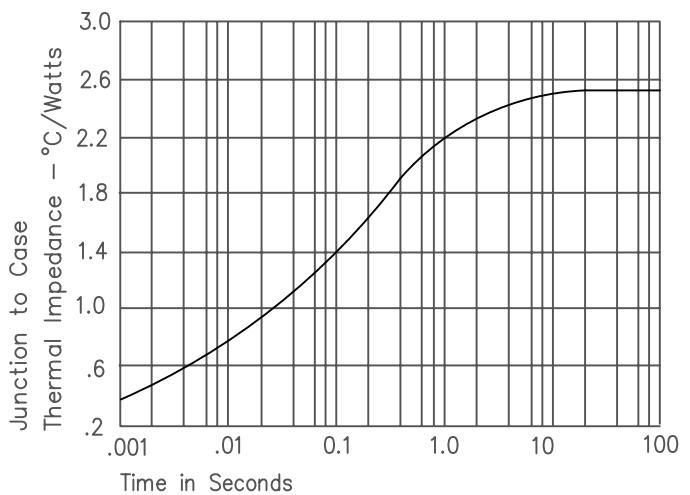


Figure 5
Transient Thermal Impedance



Mouser Electronics

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