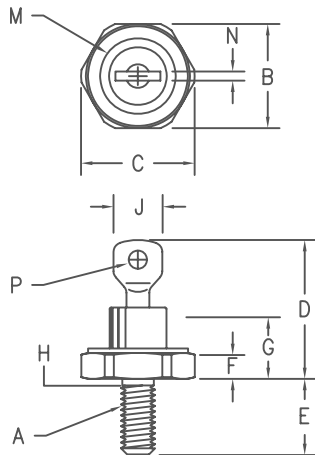


Silicon Power Rectifier S/R21 Series



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		Notes
	Minimum	Maximum	Minimum	Maximum	
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

D0203AA (D04)

Microsemi Catalog Number	JEDEC Numbers	Peak Reverse Voltage
1N2246,A 1N2248,A	1N2598	50V 100V 150V
*S2120	1N2784	1N4506 200V 300V
*S2140	1N2785	1N4507 400V 500V
*S2160		1N4508 600V 700V
*S2180	1N2260,A 1N3670,A 1N3671,A 1N3672,A	1N4509 800V 900V
*S21100	1N2262,A	1N4510 1000V
*S21120	1N2264,A	1N4511 1200V
*S21140		1400V
*S21160	1N5331	1600V

*Change S to R in part number for Reverse Polarity
For 1N types, use an R suffix for Reverse Polarity

- Glass Passivated Die
- Low Forward Voltage
- 250A Surge Rating
- Glass to metal seal construction
- V_{RRM} to 1600V
- Low cost Non-RoHS package

Electrical Characteristics

Average forward current	IF(AV) 22 Amps	$T_C = 134^\circ\text{C}$, half sine wave, $R_{\theta JC} = 2.5^\circ\text{C/W}$
Maximum surge current	IFSM 250 Amps	8.3ms, half sine, $T_J = 200^\circ\text{C}$
Max I ² t for fusing	I ² t 260 A ² s	
Max peak forward voltage	V _{FM} 1.2 Volts	IFM = 30A: $T_J = 25^\circ\text{C}$ *
Max peak reverse current	IRM 10 μA	$V_{RRM}, T_J = 25^\circ\text{C}$
Max peak reverse current	IRM 1.0 mA	$V_{RRM}, T_J = 150^\circ\text{C}$
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}	2.5°C/W Junction to Case
Mounting torque		25-30 inch pounds
Weight		.16 ounces (5.0 grams) typical

S/R21

Figure 1
Maximum Forward Characteristics

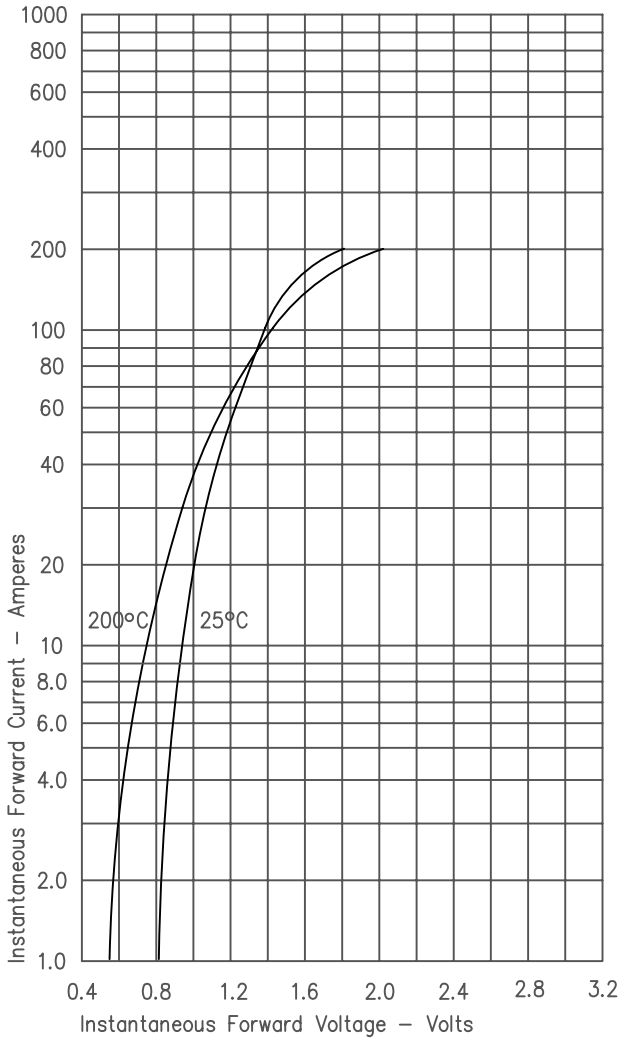


Figure 3
Forward Current Derating

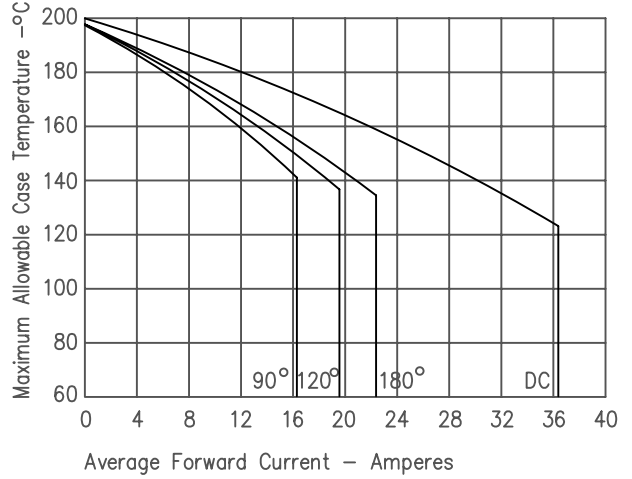


Figure 4
Maximum Forward Power Dissipation

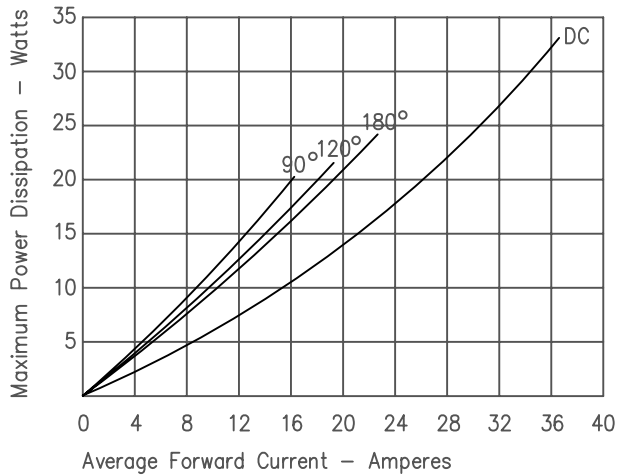


Figure 2
Typical Reverse Characteristics

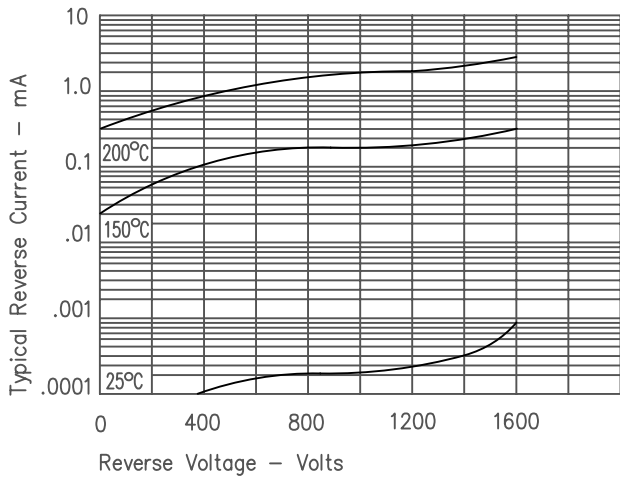


Figure 5
Transient Thermal Impedance

