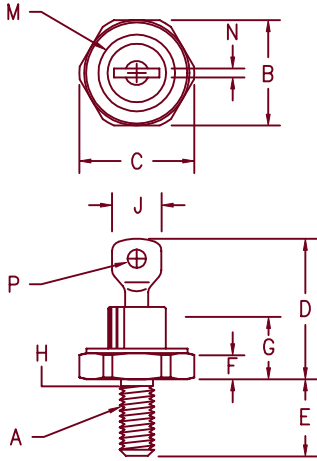


# Silicon Power Rectifier S/R21 Series



### 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	1N2598	50V
1N2248,A		100V
		150V
*S2120	1N2250,A	200V
	1N2252,A	300V
*S2140	1N2254,A	400V
	1N2256,A	500V
*S2160	1N2258,A	600V
		700V
	1N3670,A	800V
*S2180	1N2260,A	900V
	1N3671,A	1N4509
	1N3672,A	
*S21100	1N2262,A	1N4510
*S21120	1N2264,A	1N4511
*S21140		1400V
*S21160	1N5331,A	1600V

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

<ul style="list-style-type: none"> <li>• Glass Passivated Die</li> <li>• Low Forward Voltage</li> <li>• 250A Surge Rating</li> <li>• Glass to metal seal construction</li> <li>• <math>V_{RRM}</math> to 1600V</li> </ul>
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### Electrical Characteristics

Average forward current	$I_F(AV)$ 22 Amps	$T_C = 134^\circ C$ , half sine wave, $R_{\theta JC} = 2.5^\circ C/W$ 8.3ms, half sine, $T_J = 200^\circ C$
Maximum surge current	$I_{FSM}$ 250 Amps	
Max $I^2 t$ for fusing	$I^2 t$ 260 $A^2 s$	$I_{FM} = 30A; T_J = 25^\circ C$ $V_{RRM, T_J = 25^\circ C}$ $V_{RRM, T_J = 150^\circ C}$
Max peak forward voltage	$V_{FM}$ 1.2 Volts	
Max peak reverse current	$I_{RM}$ 10 $\mu A$	
Max peak reverse current	$I_{RM}$ 1.0 mA	
Max Recommended Operating Frequency	10kHz	

\*Pulse test: Pulse width 300  $\mu sec$ . Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	$-65^\circ C$ to $200^\circ C$
Operating junction temp range	$T_J$	$-65^\circ C$ to $200^\circ C$
Maximum thermal resistance	$R_{\theta JC}$	$2.5^\circ C/W$ Junction to Case
Mounting torque		25-30 inch pounds
Weight		.16 ounces (5.0 grams) typical

# S/R21

Figure 1  
Maximum Forward Characteristics

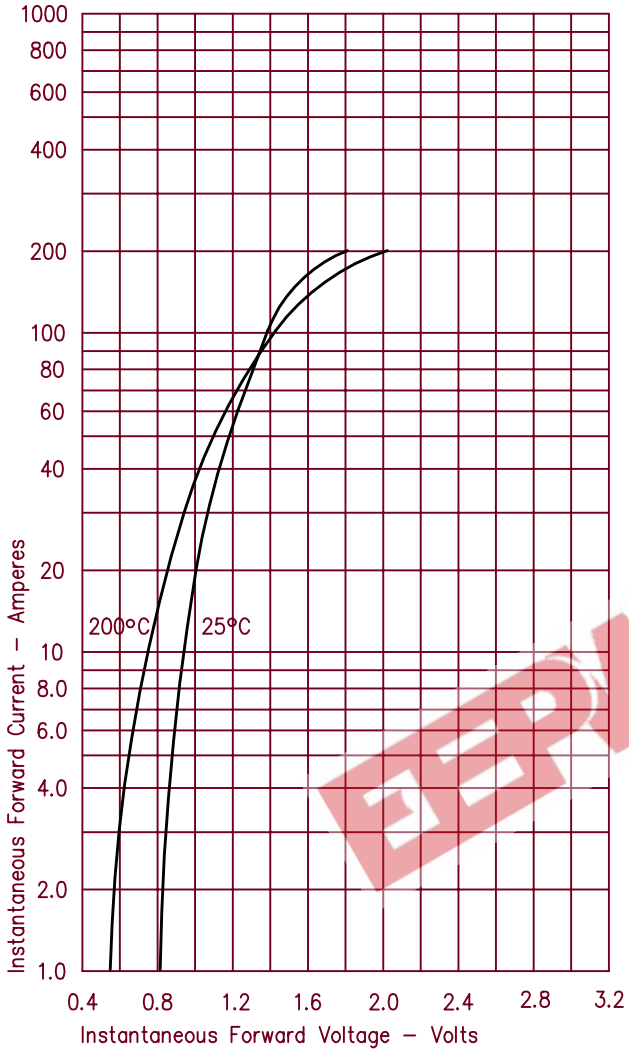


Figure 3  
Forward Current Derating

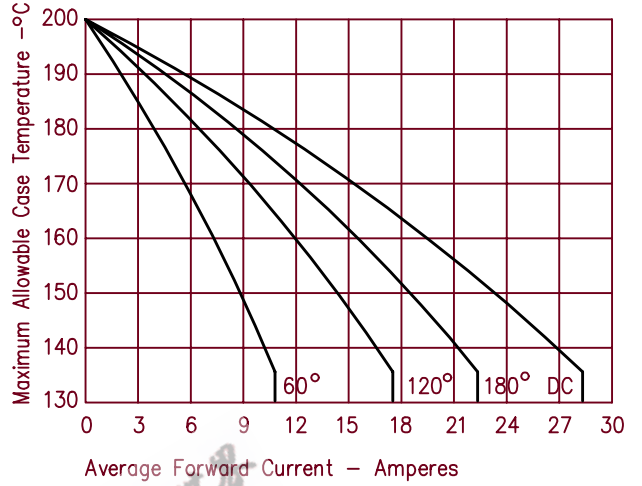


Figure 4  
Maximum Forward Power Dissipation

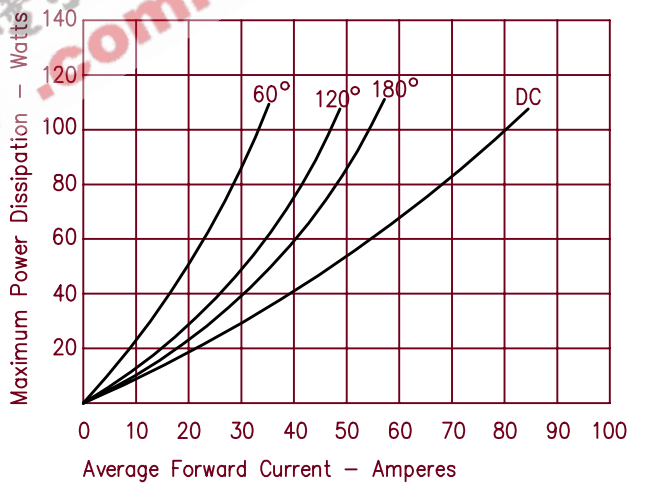


Figure 2  
Typical Reverse Characteristics

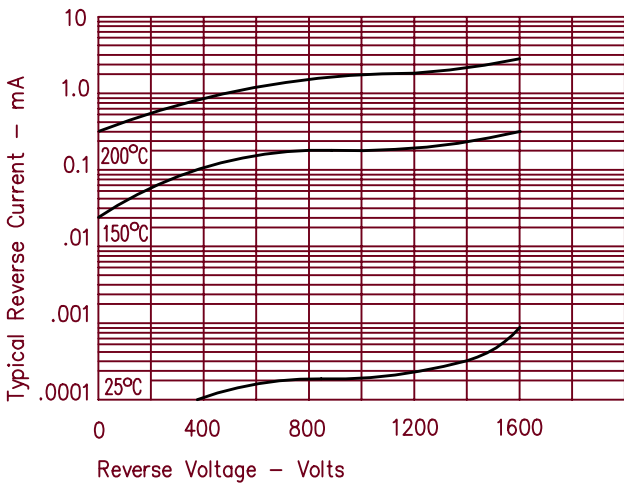


Figure 5  
Transient Thermal Impedance

