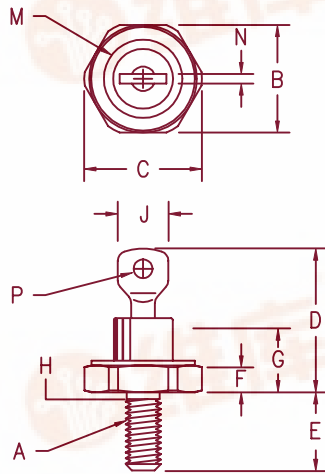


Silicon Power Rectifier

S/R20 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	Microsemi Number	JEDEC Numbers					Peak Reverse Voltage
	1N1064	1N1341, A,B,C	1N1581	1N1612,A	1N2228,A	1N2491	50V
	1N1065	1N1342, A,B,C	1N1582	1N1613,A		1N2492	100V
	1N1066	1N1343, A,B,C					150V
*S2020	1N1067	1N1344, A,B,C	1N1583	1N1614,A	1N2230,A	1N2493	200V
	1N1068	1N1345, A,B,C	1N1584		1N2232,A	1N2494	300V
*S2040	1N1069	1N1346, A,B,C	1N1585	1N1615,A	1N2234,A	1N2495	400V
		1N1347, A,B,C	1N1586		1N2236,A	1N2496	500V
*S2060		1N1348, A,B,C	1N1587	1N1616,A	1N2238,A	1N2497	600V
*S2080					1N2240,A		800V
*S20100					1N2242,A		1000V
*S20120					1N2244,A		1200V

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

- Glass Passivated Die
- Low Forward Voltage
- 200A Surge Rating
- Glass to metal seal construction
- V_{RRM} to 1200V

Electrical Characteristics

Average forward current	$I_F(AV)$ 16 Amps	$T_C = 153^\circ C$, half sine wave, $R_{\theta JC} = 2.5^\circ C/W$
Maximum surge current	I_{FSM} 200 Amps	8.3ms, half sine, $T_J = 200^\circ C$
Max $I^2 t$ for fusing	$I^2 t$ 165 $A^2 s$	
Max peak forward voltage	V_{FM} 1.3 Volts	$I_{FM} = 30A; T_J = 25^\circ C$
Max peak reverse current	I_{RM} 10 μA	$V_{RRM}, T_J = 25^\circ C$
Max peak reverse current	I_{RM} 1.0 mA	$V_{RRM}, T_J = 150^\circ C$
Max Recommended Operating Frequency	10kHz	

*Pulse test: Pulse width 300 μsec . Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	$-65^\circ C$ 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/R20

Figure 1
Typical Forward Characteristics

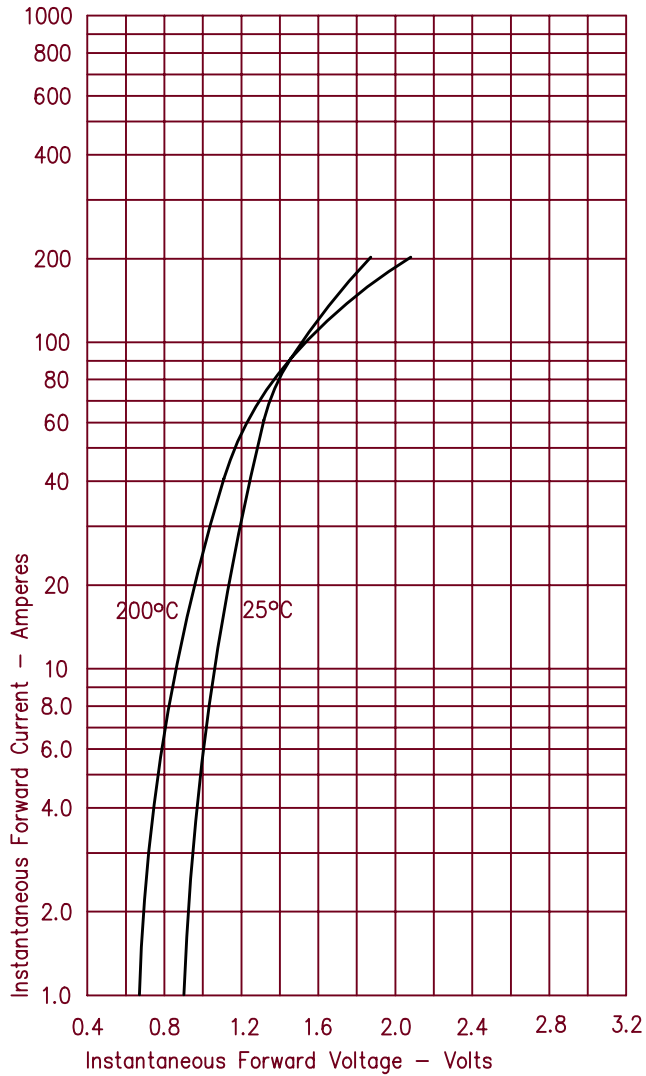


Figure 2
Typical Reverse Characteristics

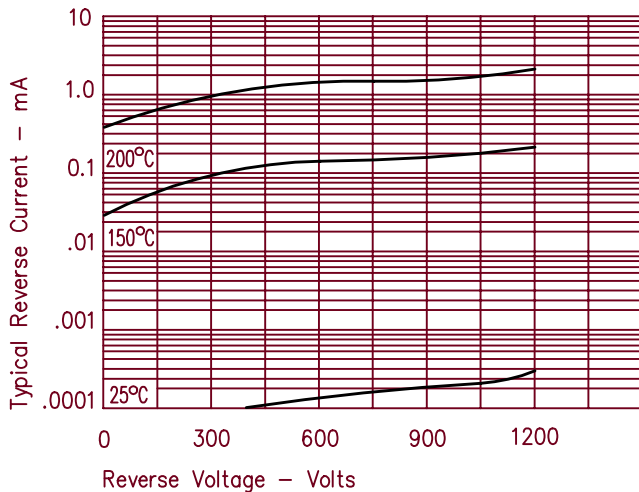


Figure 3
Forward Current Derating

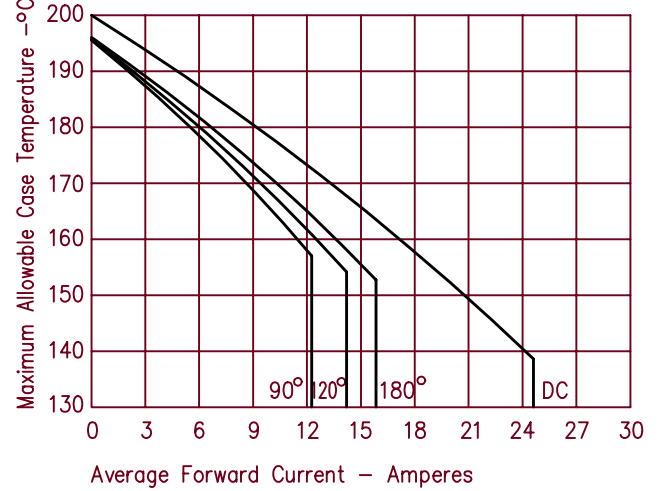


Figure 4
Maximum Forward Power Dissipation

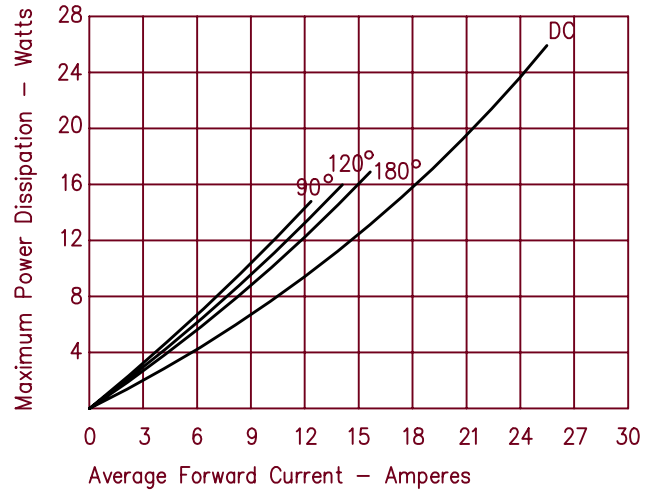


Figure 5
Transient Thermal Impedance

