ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number:	1N2242A
Manufacturer:	Microchip Technology
Package:	DO-203AA, DO-4, Stud
Availability:	Please confirm with sales

Product Page:

https://antrexco.com/product/details/microchip-technology/1n2242a.html

Request a Quote:

Submit RFQ for this part

Scan for product page

Contact Information

Email: info@antrexco.com

WhatsApp: +86-186-8066-5326

Website: https://antrexco.com

Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

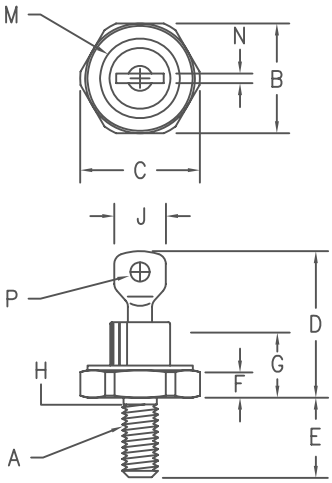
Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

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		
	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 (DO4)

Microsemi Catalog 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				1N4458	1N2240,A		800V
*S20100				1N4459	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
- Low cost Non–RoHS package

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 16 Amps	T_C = 153°C, half sine wave, $R_{\theta JC}$ = 2.5°C/W
Maximum surge current	I_{FSM} 200 Amps	8.3ms, half sine, T_J = 200°C
Max I^2t for fusing	I^2t 165 A^2s	
Max peak forward voltage	V_{FM} 1.3 Volts	I_{FM} = 30A; T_J = 25°C *
Max peak reverse current	I_{RM} 10 µA	V_{RRM}, T_J = 25°C
Max peak reverse current	I_{RM} 1.0 mA	V_{RRM}, T_J = 150°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	$R_{\theta JC}$	2.5°C/W Junction to Case
Mounting torque		25–30 inch pounds
Weight		.16 ounces (5.0 grams) typical

LAWRENCE Microsemi
6 Lake Street
Lawrence, MA 01841
PH: (978) 620–2600
FAX: (978) 689–0803
www.microsemi.com

05–01–07 Rev. 6

S/R20

Figure 1
Typical Forward Characteristics

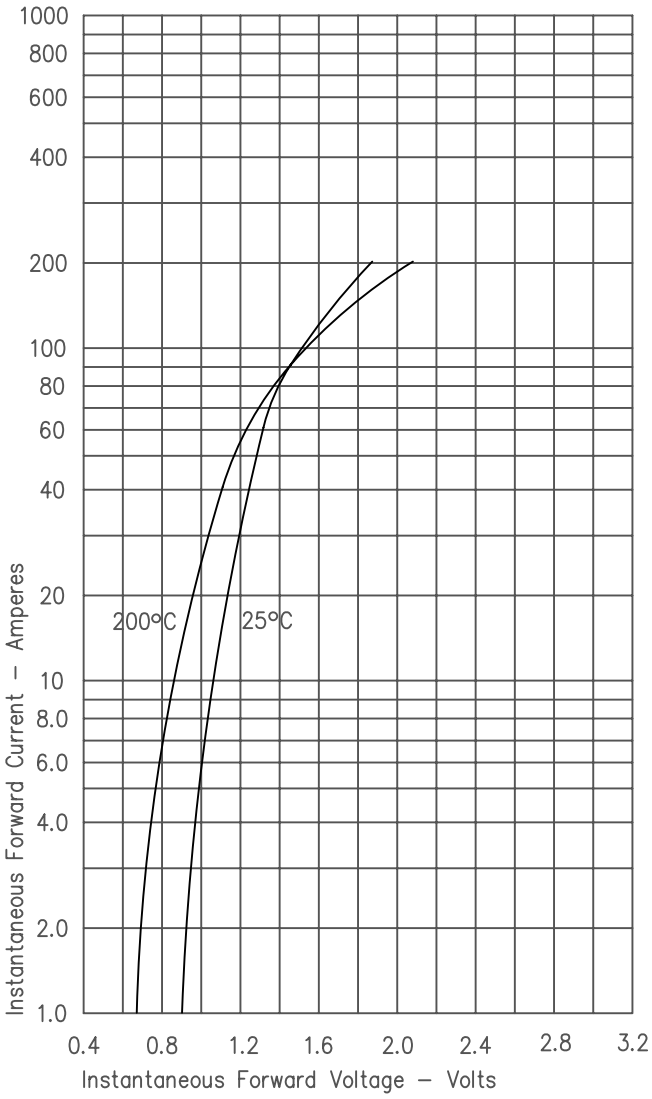


Figure 2
Typical Reverse Characteristics

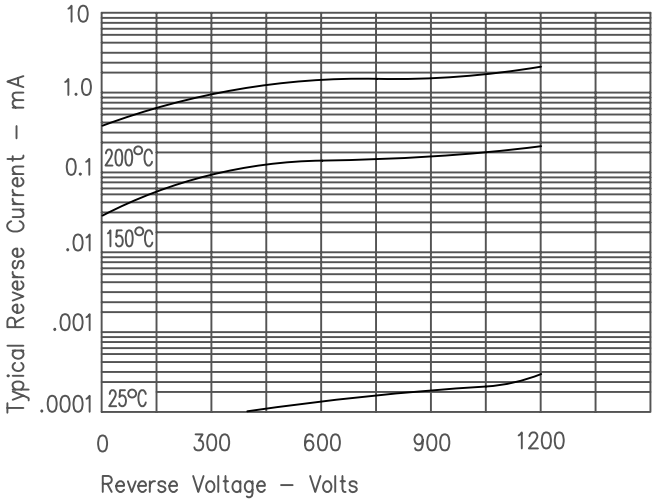


Figure 3
Forward Current Derating

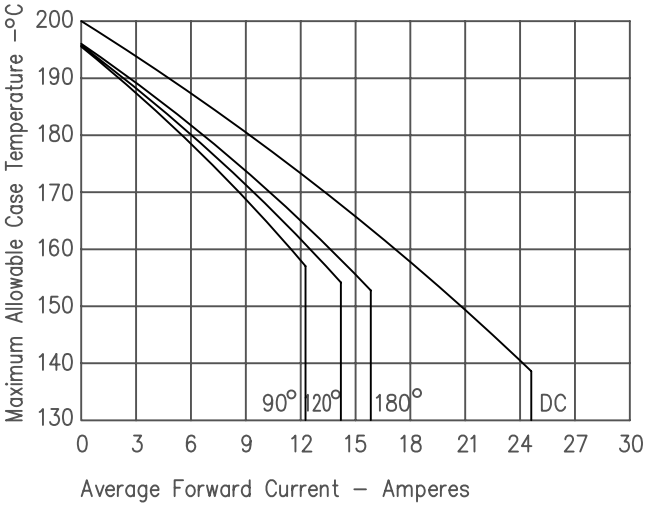


Figure 4
Maximum Forward Power Dissipation

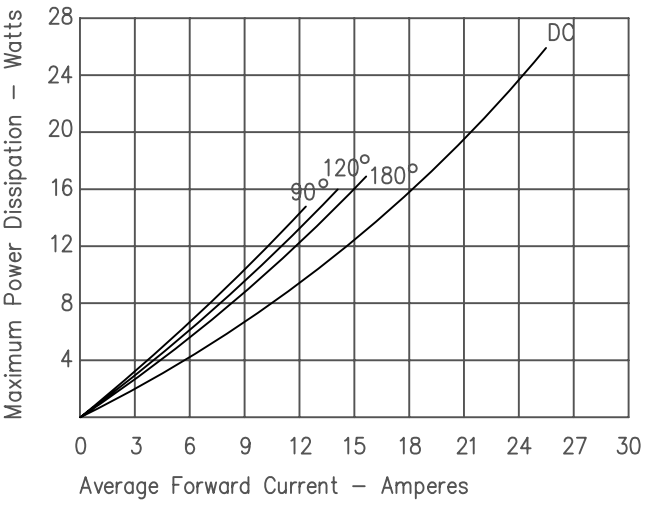


Figure 5
Transient Thermal Impedance