



Shanghai Minyue
Semiconductors Co.,Ltd
Tel:0086-21-57159233
Fax:0086-21-60415325

R1200 THRU R2000

500 Milliamp High Voltage Silicon Rectifier 1200 to 2000 Volts

Features

- Low Cost
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- High Current Capability
- High Voltage

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

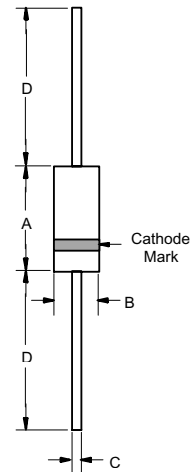
Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
R1200	R1200	1200V	840V	1200V
R1500	R1500	1500V	1050V	1500V
R1800	R1800	1800V	1260V	1800V
R2000	R2000	2000V	1400V	2000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	500mA	$T_A = 50^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage R1200-R1800 R2000	V_F	2.0V 3.0V	$I_{FM} = 0.5A;$ $T_A = 50^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA 50μA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	C_J	30pF	Measured at 1.0MHz, $V_R=4.0V$

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

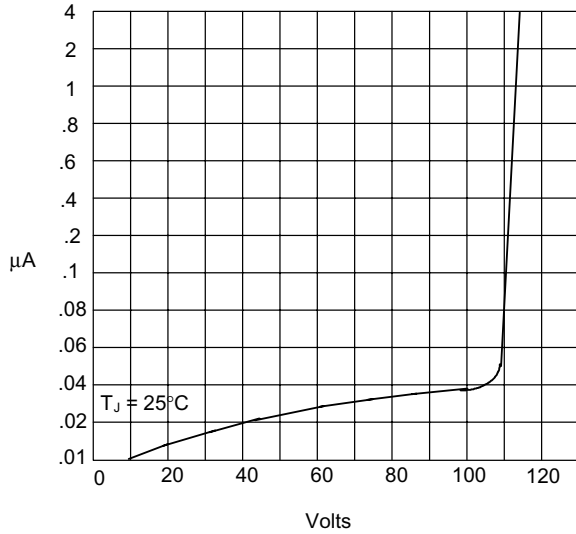
DO-41



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

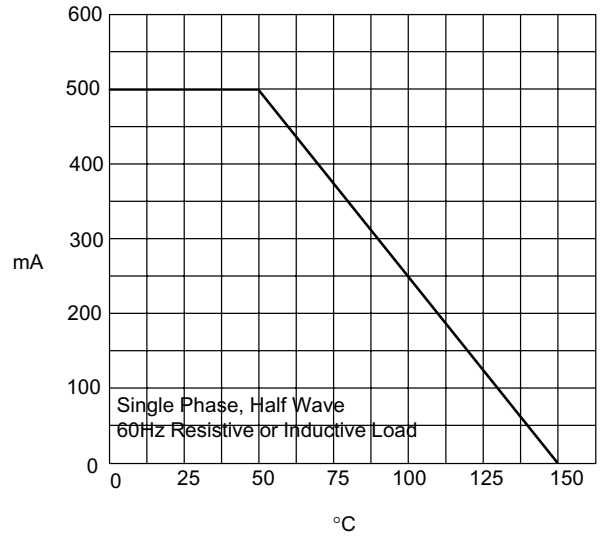
R1200 - R2000

Figure 1
Typical Reverse Characteristics



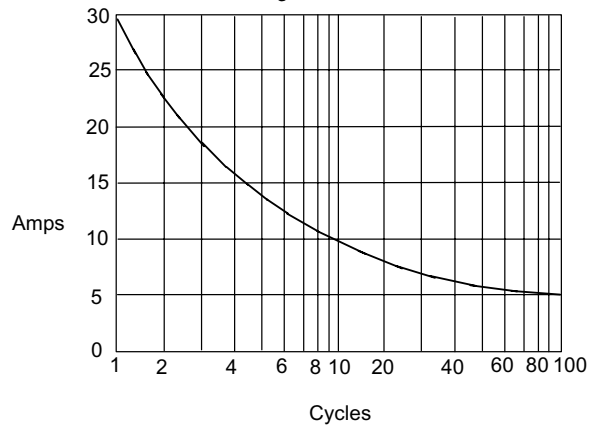
Instantaneous Reverse Current - Micro Amperes
Percent Of Rated Peak Reverse Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes
Ambient Temperature - °C

Figure 3
Peak Forward Surge Current



Peak Forward Surge Current - Amperes
Number Of Cycles At 60Hz - Cycles