



Micro Commercial Components  
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# RS1001 THRU RS1007

## Features

- Low Leakage
- Low Forward Voltage
- Any Mounting Position
- Silver Plated Copper Leads

## 10 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

## Maximum Ratings

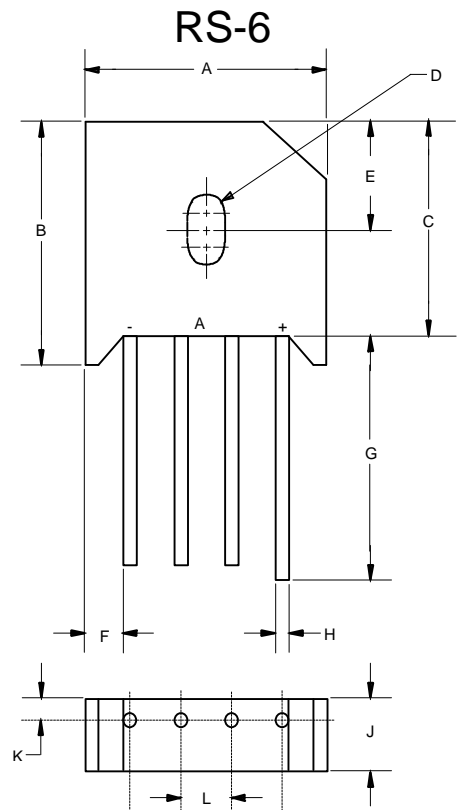
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RS1001	RS1001	50V	35V	50V
RS1002	RS1002	100V	70V	100V
RS1003	RS1003	200V	140V	200V
RS1004	RS1004	400V	280V	400V
RS1005	RS1005	600V	420V	600V
RS1006	RS1006	800V	560V	800V
RS1007	RS1007	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10 A	$T_J = 65^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	300A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.1V	$I_{FM} = 5.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 100mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

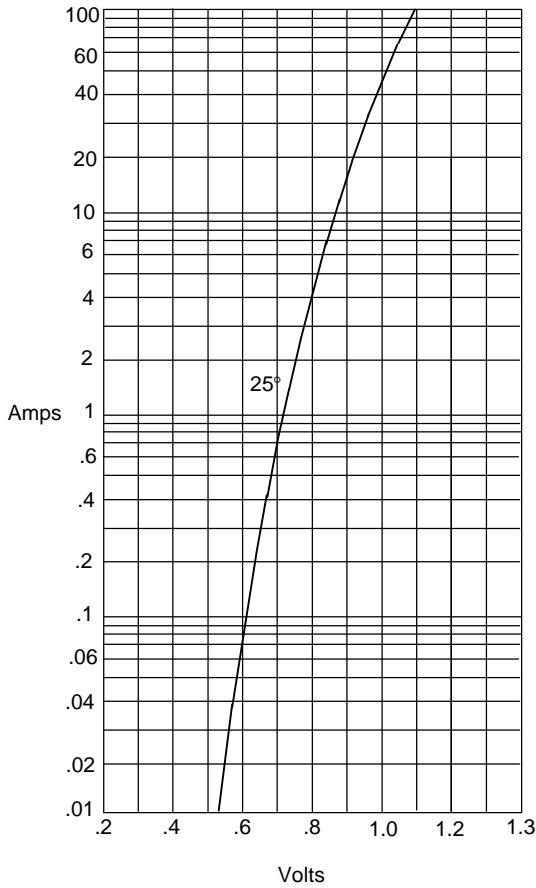
\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 1%



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.925	---	23.50	
B	---	.763	---	19.40	
C	---	.680	---	17.20	NOM
D	.15 $\varnothing$ x .23L		3.8 $\varnothing$ x 5.57L		HOLE
E	---	.300	---	7.50	NOM
F	---	.157	---	4.00	NOM
G	1.00	---	25.40	---	
H	---	.050	---	1.30	TYP
J	---	.280	---	7.00	
K	---	.075	---	1.90	NOM
L	---	.200	---	5.10	3PL

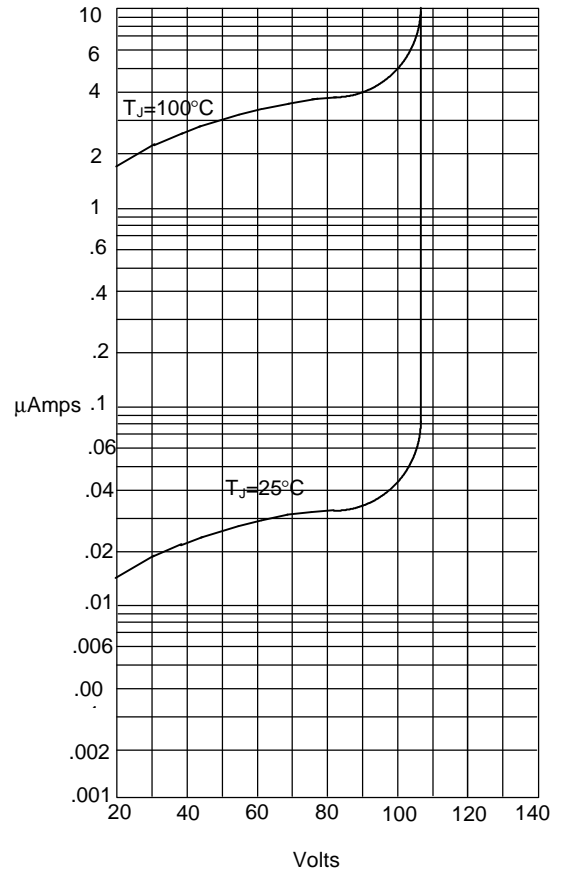
# RS1001 thru RS1007

Figure 1  
Typical Forward Characteristics



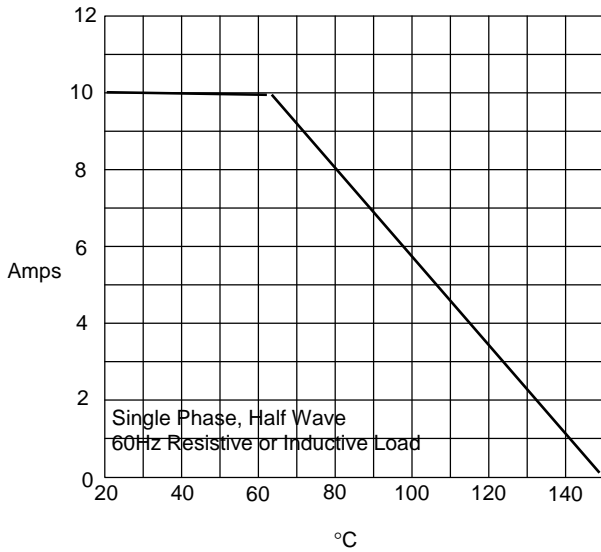
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



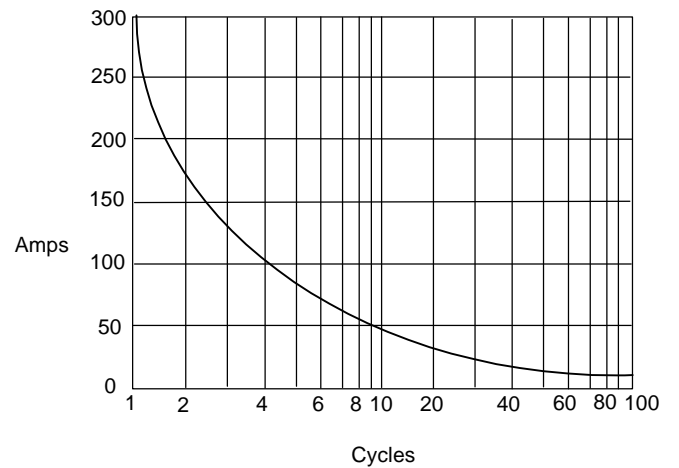
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



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