



MASTER INSTRUMENT CORPORATION

RS1001 THRU RS1007

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 10 Amperes

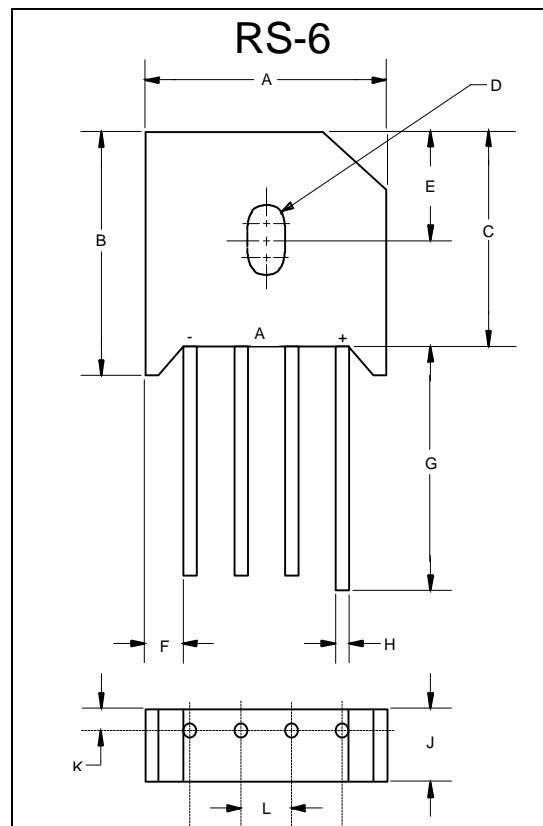
Features

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

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



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.925	---	23.50	
B	---	.763	---	19.40	
C	---	.680	---	17.20	NOM
D	.150	x .23L	3.80	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

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	$I_{FM} = 5.0A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10μA 100mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

*Pulse test: Pulse width 300 μsec, Duty cycle 1%

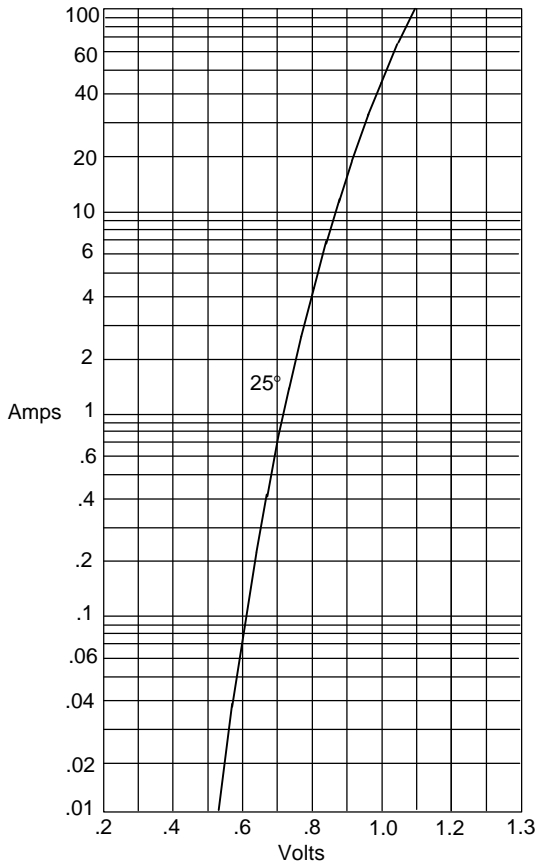


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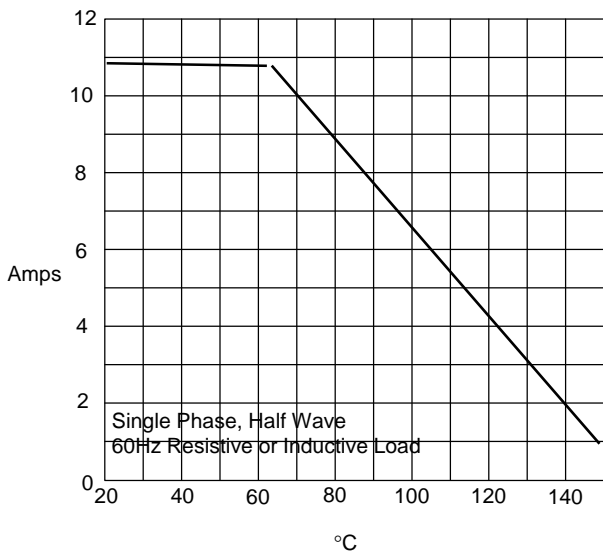
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Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

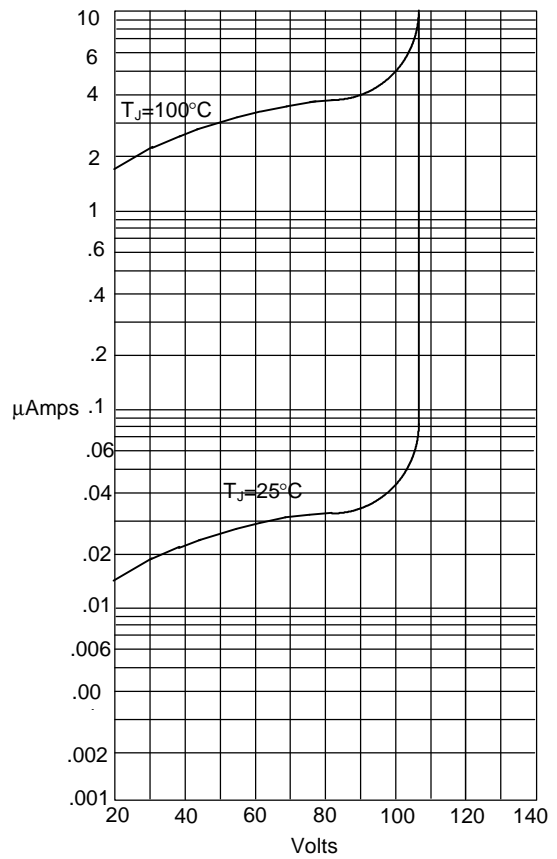
Figure 3
Forward Derating Curve



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

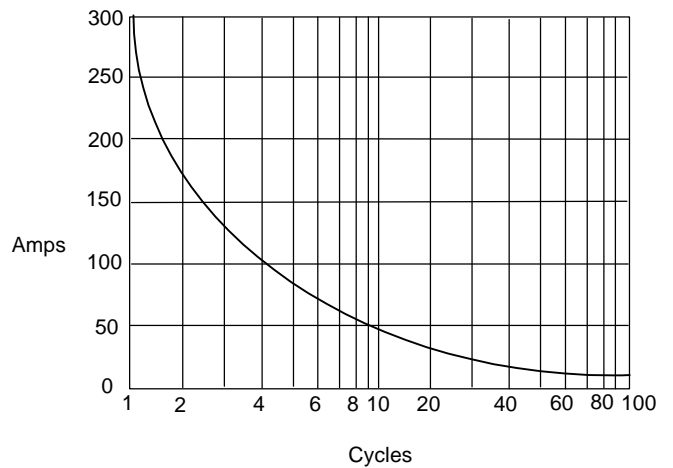
Single Phase, Half Wave
60Hz Resistive or Inductive Load

Figure 2
Typical Reverse Characteristics



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

Figure 4
Peak Forward Surge Current



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