



**Micro Commercial Components**™  
 Micro Commercial Corp.  
 20736 Marilla St.  
 Chatsworth, CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

**RS801  
 THRU  
 RS807**

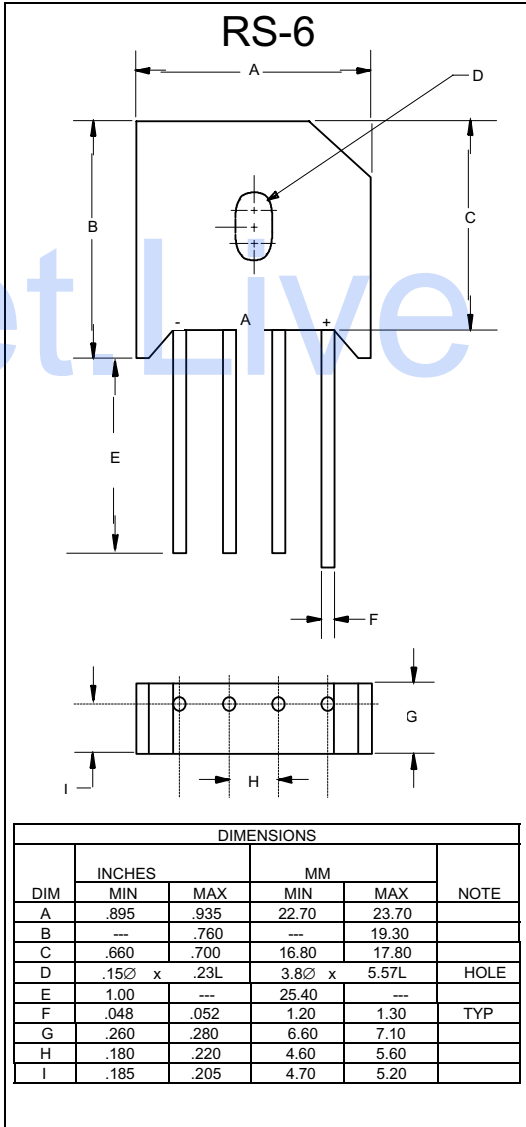
**Features**

- Surge Overload Rating Of 300 Amps
- Low Leakage and Low Forward Voltage
- Any Mounting Position
- Silver Plated Copper Leads
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)

**8 Amp Single Phase  
 Bridge Rectifier  
 50 to 1000 Volts**

**Maximum Ratings**

- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989



Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RS801	RS801	50V	35V	50V
RS802	RS802	100V	70V	100V
RS803	RS803	200V	140V	200V
RS804	RS804	400V	280V	400V
RS805	RS805	600V	420V	600V
RS806	RS806	800V	560V	800V
RS807	RS807	1000V	700V	1000v

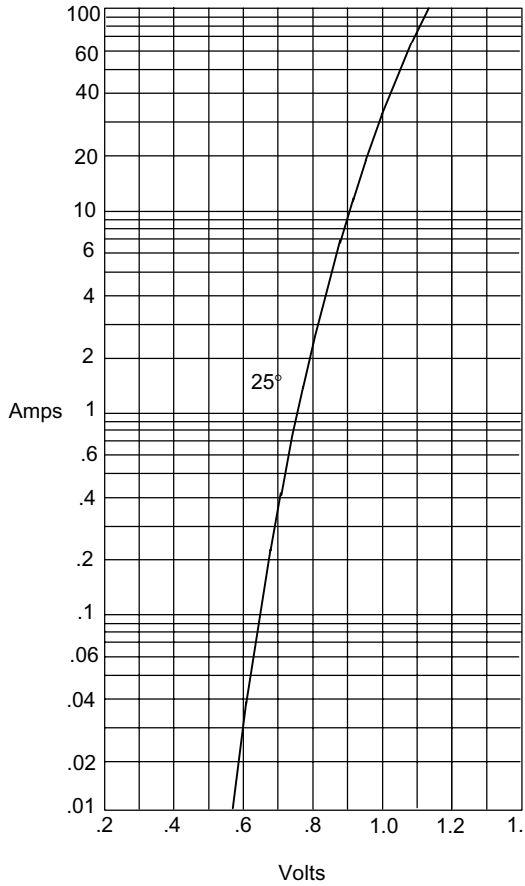
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	8.0A 6.0A	$T_C = 90^\circ C$ $T_A = 45^\circ C$
Peak Forward Surge Current	$I_{FSM}$	300A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.1V	$I_{FM} = 4.0A;$ $T_J = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10µA 1mA	$T_J = 25^\circ C$ $T_J = 100^\circ C$
Typical Thermal Resistance Per Leg	$T_{thJA}$ $T_{thJC}$	18°C/W 3.0°C/W	(Note 2) (Note 3)

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.  
 2. Units mounted in free air, no heatsink, P.C.B 0.375"(9.5mm) lead length with 0.5x0.5"(12x12mm) copper pads.  
 2. Units mounted on a 3.0x3.0x0.11"(7.5x7.5x0.3cm) Al. Plate heatsink.

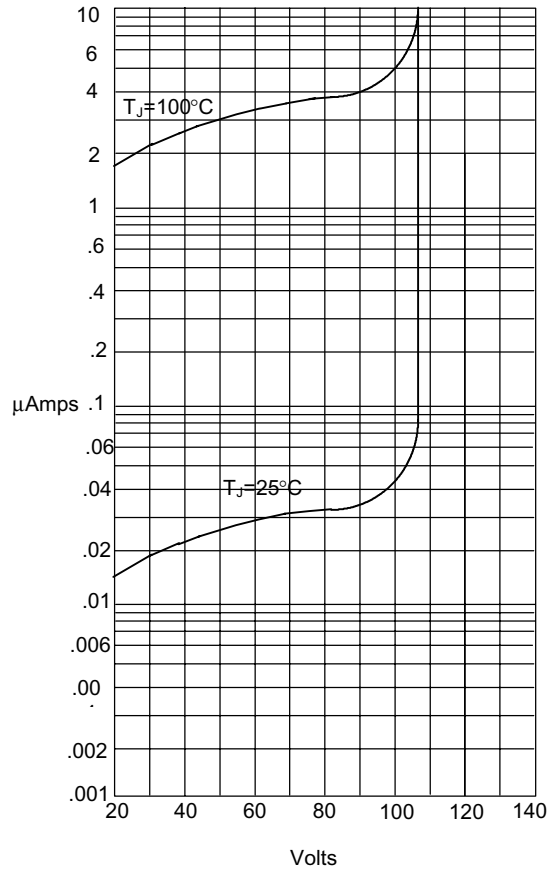
**RS801 thru RS807**

Figure 1  
Typical Forward Characteristics



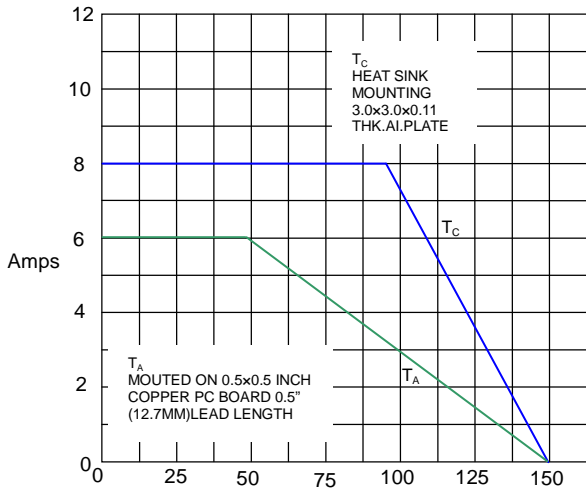
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 2  
Micro Commercial Components  
Typical Reverse Characteristics



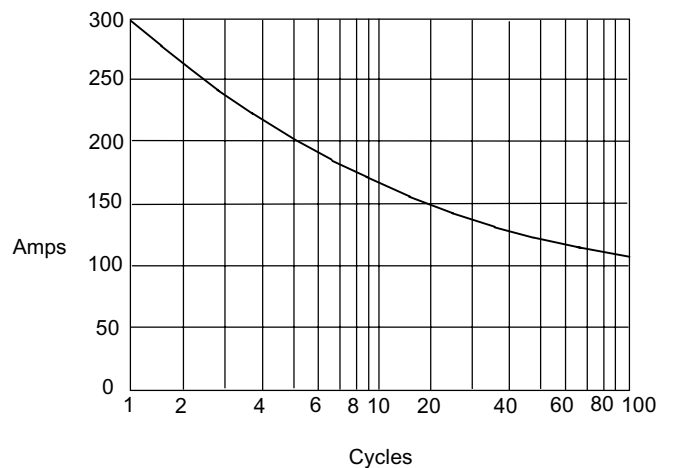
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Typical Forward Output Current Derating Curve



Average Forward Rectified Current - Amperes versus

Figure 4  
Peak Forward Surge Current



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



Micro Commercial Components

## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;200pcs/Box

**\*\*\*IMPORTANT NOTICE\*\*\***

*Micro Commercial Components Corp.* reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*APPLICATIONS DISCLAIMER\*\*\***

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.

[www.mccsemi.com](http://www.mccsemi.com)