



Micro Commercial Components

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## RS401L THRU RS407L

### Features

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

### Maximum Ratings

- Operating Temperature( $T_J$ ): -55°C to +125°C
- Storage Temperature( $T_{stg}$ ): -55°C to +150°C
- Typical Thermal Resistance per leg ( $R_{thja}$ ): 19°C/W.
- Typical Thermal Resistance per leg ( $R_{thjL}$ ): 2.4°C/W.

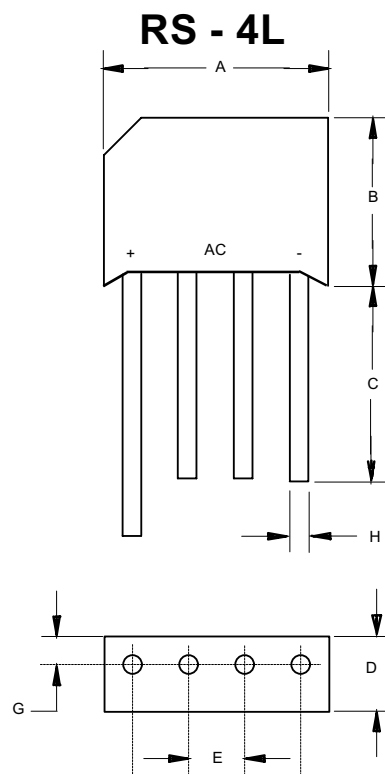
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| RS401L             | RS401L         | 50V                                    | 35V                 | 50V                         |
| RS402L             | RS402L         | 100V                                   | 70V                 | 100V                        |
| RS403L             | RS403L         | 200V                                   | 140V                | 200V                        |
| RS404L             | RS404L         | 400V                                   | 280V                | 400V                        |
| RS405L             | RS405L         | 600V                                   | 420V                | 600V                        |
| RS406L             | RS406L         | 800V                                   | 560V                | 800V                        |
| RS407L             | RS407L         | 1000V                                  | 700V                | 1000V                       |

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

|                                                         |             |                           |                                                       |
|---------------------------------------------------------|-------------|---------------------------|-------------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 4.0A                      | $T_A = 50^\circ\text{C}$                              |
| Peak Forward Surge Current                              | $I_{FSM}$   | 200A                      | 8.3ms, half sine                                      |
| Maximum Forward Voltage Drop Per Element                | $V_F$       | 1.1V                      | $I_{FM} = 3.0\text{A};$<br>$T_J = 25^\circ\text{C}$   |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 10 $\mu\text{A}$<br>1.0mA | $T_J = 25^\circ\text{C}$<br>$T_J = 100^\circ\text{C}$ |

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

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

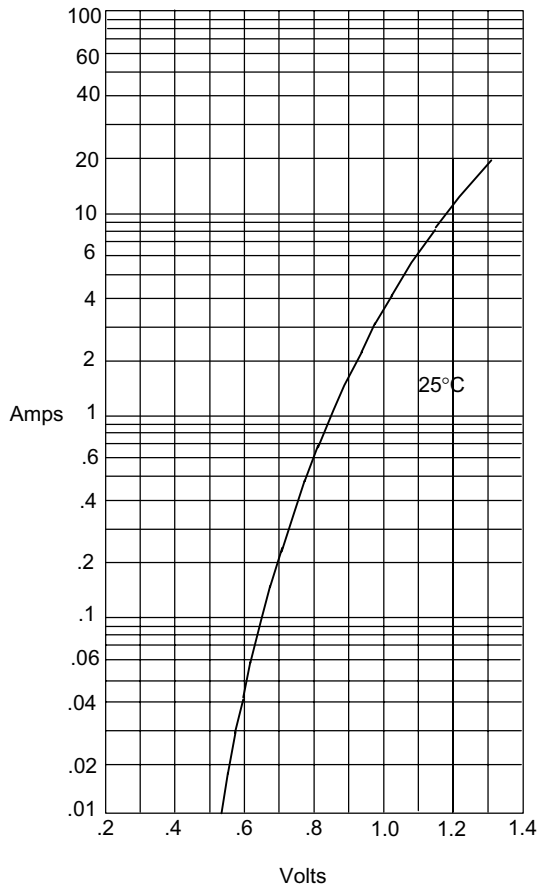


| DIMENSIONS |        |      |       |       |      |
|------------|--------|------|-------|-------|------|
| DIM        | INCHES |      | MM    |       | NOTE |
|            | MIN    | MAX  | MIN   | MAX   |      |
| A          | .728   | .768 | 18.50 | 19.50 |      |
| B          | .600   | .640 | 15.20 | 16.30 |      |
| C          | .750   | ---  | 19.00 | ---   |      |
| D          | .236   | .256 | 6.00  | 6.50  |      |
| E          | .180   | .220 | 4.60  | 5.60  |      |
| G          | -----  | .083 | ----- | 2.10  |      |
| H          | .048   | .052 | 1.20  | 1.30  |      |

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

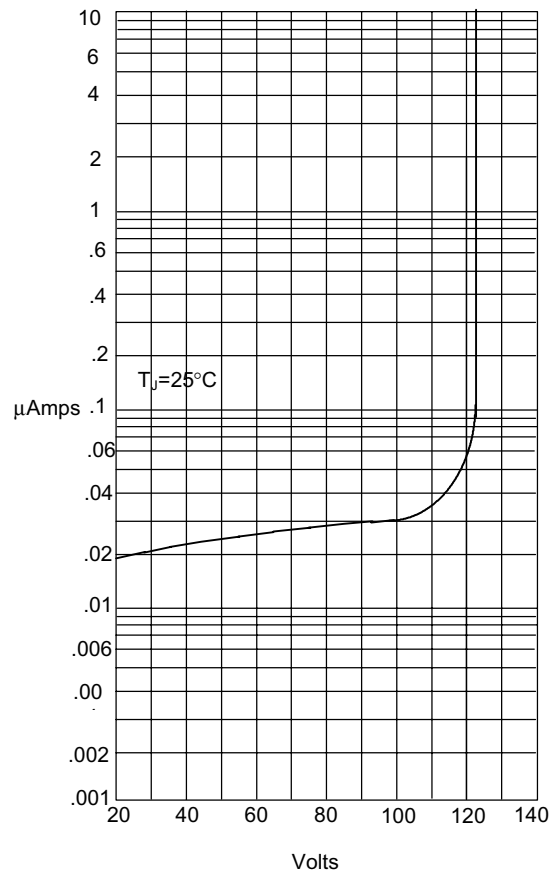
## RS401L thru RS407L

Figure 1  
Typical Forward Characteristics



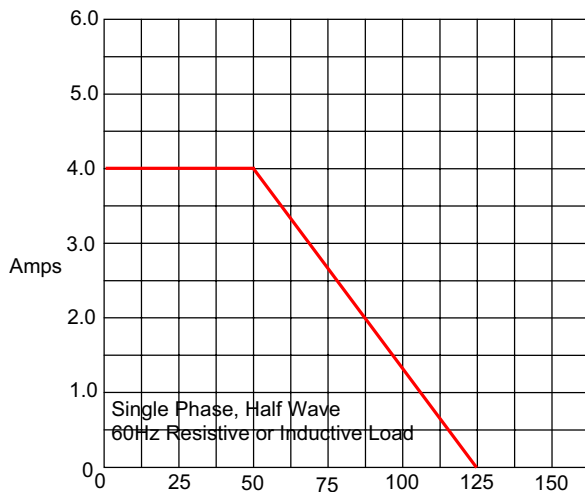
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



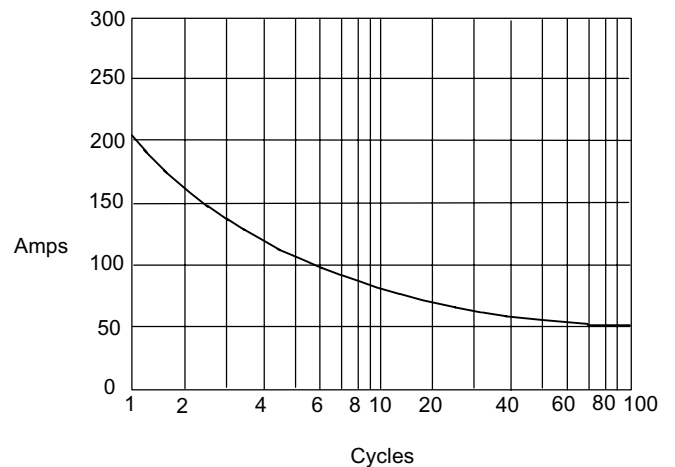
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Case Temperature - °C

Figure 4  
Peak Forward Surge Current



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

## Ordering Information

| Device           | Packing         |
|------------------|-----------------|
| (Part Number)-BP | Bulk;300pcs/Box |

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