

### Features and Benefits

- Plastic Package has UL Flammability Classification 94V-0
- Surge Overload Rating of 200A Peak
- Ideal for Printed Circuit Board
- High Reliability and Low Leakage
- Rating to 1000V PIV
- UL Recognized Under Component Index, File #E94661
- **Lead Free Finish, RoHS Compliant (Date Code 0514+)**  
(Note 1)

### Mechanical Data

- Case: RS-4L, Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Mounting Position: Any
- Weight: 5.6 grams (approximate)

### Ordering Information (Note 2)

Part Number	Case	Packaging
RS401L	RS-4L	0.5K Bulk
RS402L	RS-4L	0.5K Bulk
RS403L	RS-4L	0.5K Bulk
RS404L	RS-4L	0.5K Bulk
RS405L	RS-4L	0.5K Bulk
RS406L	RS-4L	0.5K Bulk
RS407L	RS-4L	0.5K Bulk

Notes: 1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2). All applicable RoHS exemptions applied.  
2. For Packaging Details, go to our website at <http://www.diodes.com>.

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub> = 25°C unless otherwise specified

Single phase, 60Hz, resistive or inductive load.  
For capacitance load, derate current by 20%.

Characteristic	Symbol	RS 401L	RS 402L	RS 403L	RS 404L	RS 405L	RS 406L	RS 407L	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RSM}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current @ T <sub>A</sub> = 50°C	$I_{(AV)}$	4.0							A
Peak Forward Surge Current, 8.3ms Half Sine-Wave Superimposed on Rate Load	$I_{FSM}$	200							A
Maximum Forward Voltage at 3.0A	$V_F$	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T <sub>A</sub> = 25°C	10							μA
	@ T <sub>C</sub> = 100°C	1.0							mA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	I <sup>2</sup> t	166							A <sup>2</sup> s
Operating Temperature Range	T <sub>J</sub>	-55 TO +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 TO +150							°C

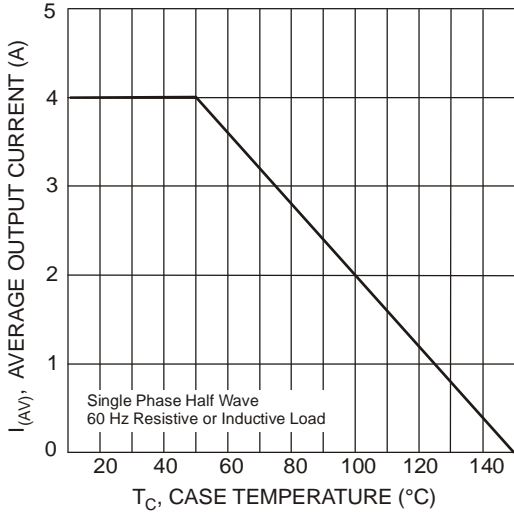


Fig. 1 Forward Current Derating Curve

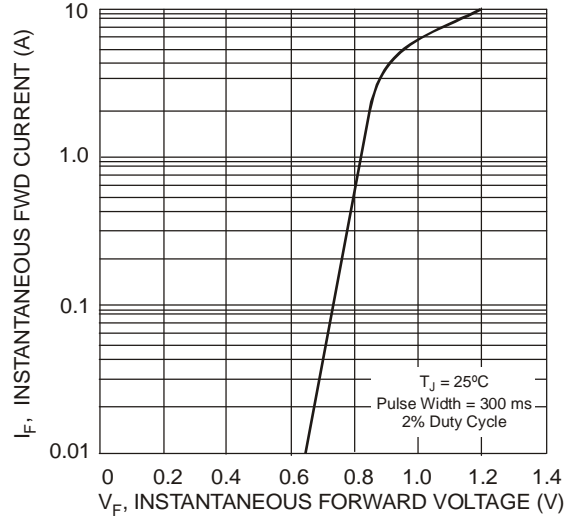


Fig. 2 Typical Forward Characteristics

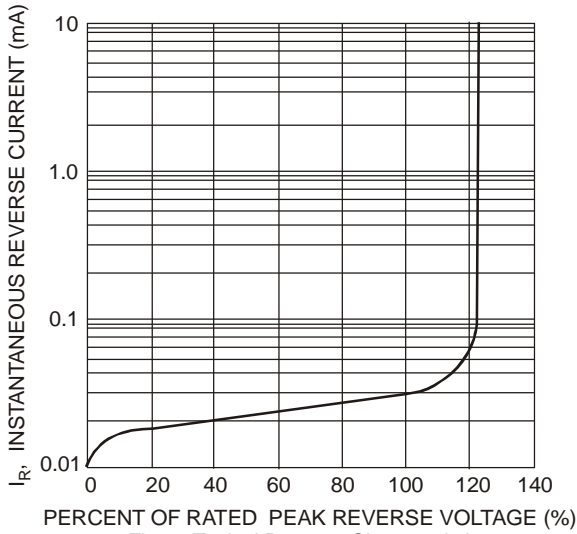


Fig. 3 Typical Reverse Characteristics

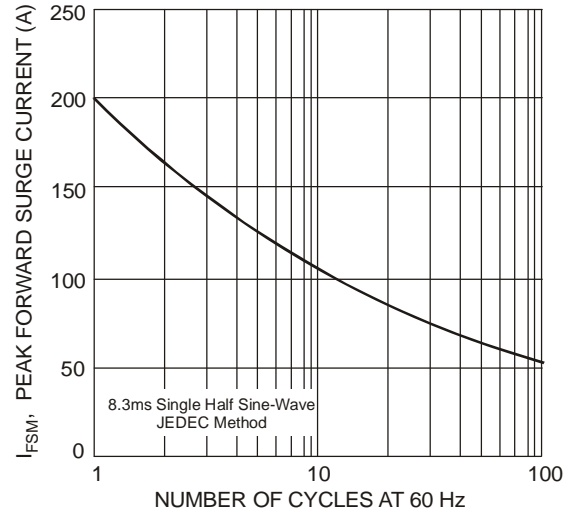
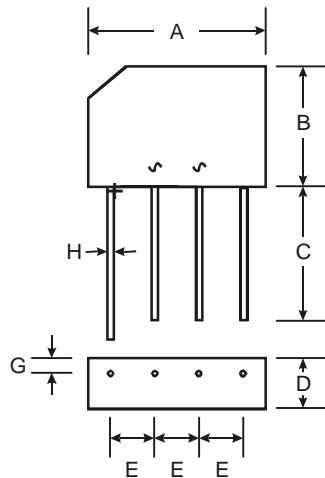


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current

## Package Outline Dimensions



RS-4L		
Dim	Min	Max
A	18.5	19.5
B	15.4	16.0
C	19.0	-
D	6.2	6.5
E	4.6	5.6
G	1.5	2.0
H	1.3 Typical	
All Dimensions in mm		

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