

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_A = 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 _A = 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 _A = 25°C	10							µA
	@T _C = 100°C	1.0							mA
I ² t Rating for Fusing (t < 8.3ms)	I ² t	166							A ² s
Operating Temperature Range	T _J	-55 TO +150							°C
Storage Temperature Range	T _{STG}	-55 TO +150							°C

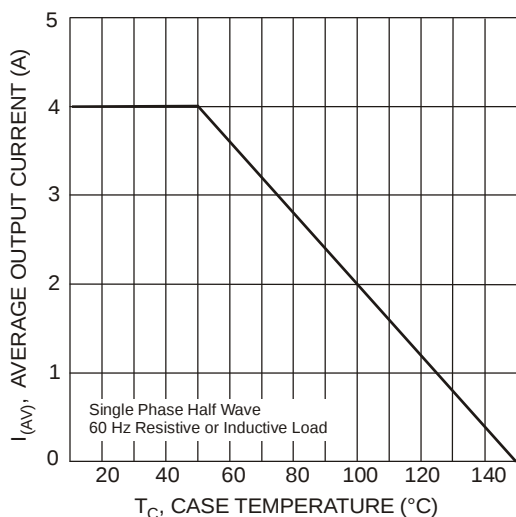


Fig. 1 Forward Current Derating Curve

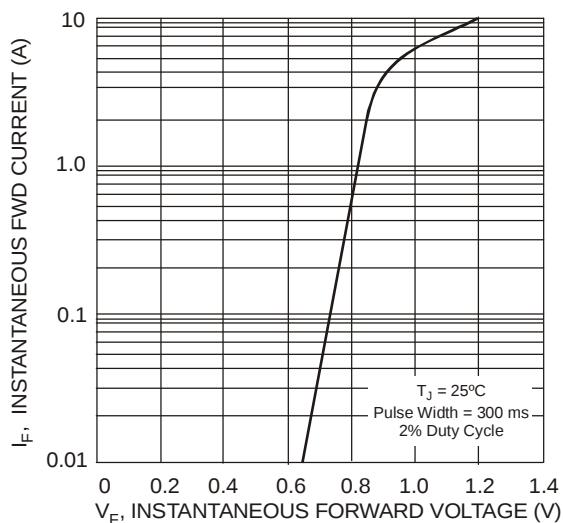


Fig. 2 Typical Forward Characteristics

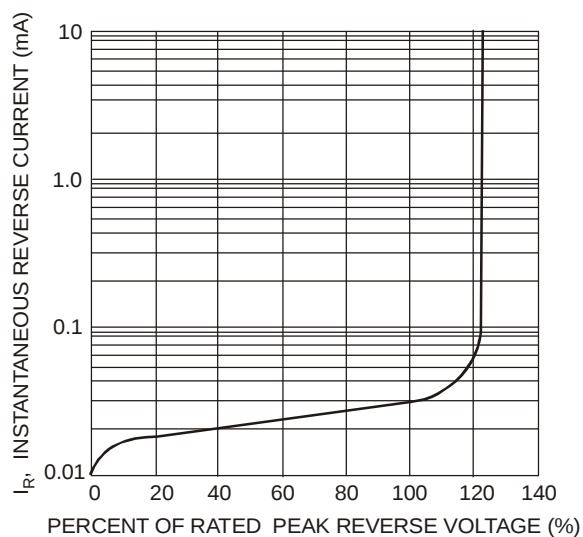


Fig. 3 Typical Reverse Characteristics

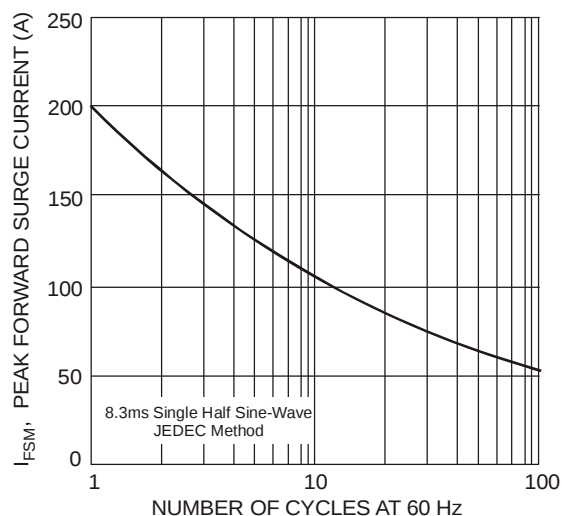
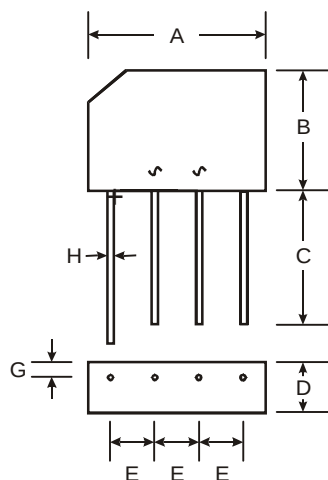


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current

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		

IMPORTANT NOTICE

DIODES INCORPORATED MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARDS TO THIS DOCUMENT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION).

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein. Diodes Incorporated does not assume any liability arising out of the application or use of this document or any product described herein; neither does Diodes Incorporated convey any license under its patent or trademark rights, nor the rights of others. Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on Diodes Incorporated website, harmless against all damages.

Diodes Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should Customers purchase or use Diodes Incorporated products for any unintended or unauthorized application, Customers shall indemnify and hold Diodes Incorporated and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

Products described herein may be covered by one or more United States, international or foreign patents pending. Product names and markings noted herein may also be covered by one or more United States, international or foreign trademarks.

LIFE SUPPORT

Diodes Incorporated products are specifically not authorized for use as critical components in life support devices or systems without the express written approval of the Chief Executive Officer of Diodes Incorporated. As used herein:

A. Life support devices or systems are devices or systems which:

1. are intended to implant into the body, or
2. support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in significant injury to the user.

B. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or to affect its safety or effectiveness.

Customers represent that they have all necessary expertise in the safety and regulatory ramifications of their life support devices or systems, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of Diodes Incorporated products in such safety-critical, life support devices or systems, notwithstanding any devices- or systems-related information or support that may be provided by Diodes Incorporated. Further, Customers must fully indemnify Diodes Incorporated and its representatives against any damages arising out of the use of Diodes Incorporated products in such safety-critical, life support devices or systems.

Copyright © 2012, Diodes Incorporated

www.diodes.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Diodes Incorporated:](#)

[RS401L](#) [RS402L](#) [RS403L](#) [RS404L](#) [RS405L](#) [RS407L](#) [RS406L](#)