

CURRENT 8 Ampere  
 VOLTAGE RANG 50 to 1000 Volts

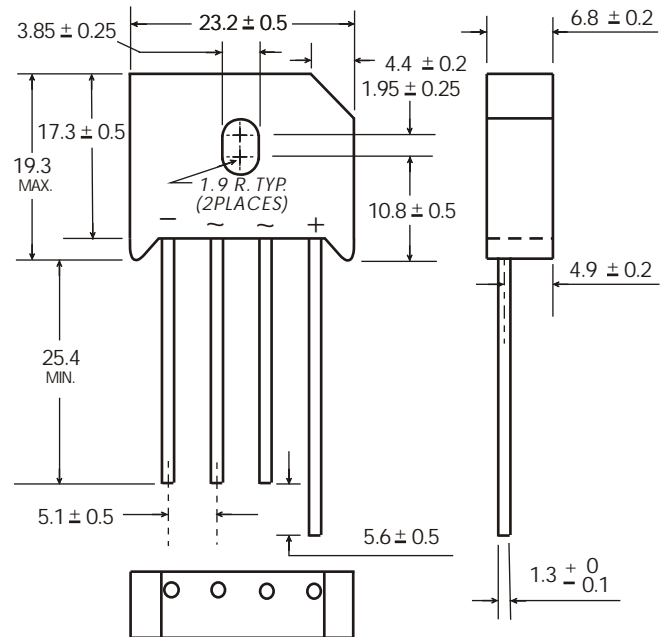
## RS801 THRU RS807

### Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Ideal for P.C. Board mounting
- High surge current capability
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension

### Mechanical Data

Case: Molded plastic body  
 Terminals: Plated leads solderable per MIL-STD-202, Method 208  
 Polarity: Polarity symbols molded on body  
 Mounting Position:: Any  
 Mounting Torque: 5 in-lbs max.  
 Weight: 0.3 ounce, 8.0 grams (approx)



Dimensions in millimeters(1mm =0.0394")

### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
 For Capacitive load derate current by 20%.

Parameter	Symbol	RS801	RS802	RS803	RS804	RS805	RS806	RS807	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at T <sub>C</sub> =100°C T <sub>C</sub> =45°C	IF(AV)				8.0 4.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				250				A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t				300				A <sup>2</sup> sec
Typical thermal resistance per element(1)	ReJA				2.5				°C / W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>				-55 to + 150				°C

### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
 For Capacitive load derate by 20 %.

Parameter	Symbol	RS801	RS802	RS803	RS804	RS805	RS806	RS807	Unit
Maximum instantaneous forward voltage drop per leg at 4.0A	VF				1.1				V
Maximum DC reverse current at rated DC blocking voltage per element T <sub>A</sub> =25°C T <sub>A</sub> =125°C	IR				10 1000				μA

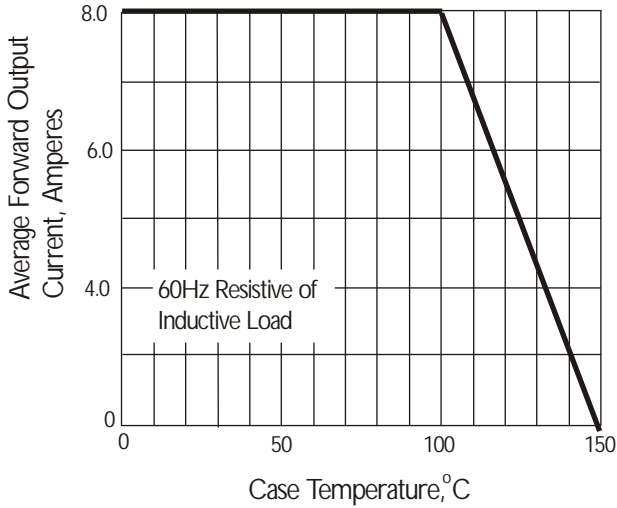
Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

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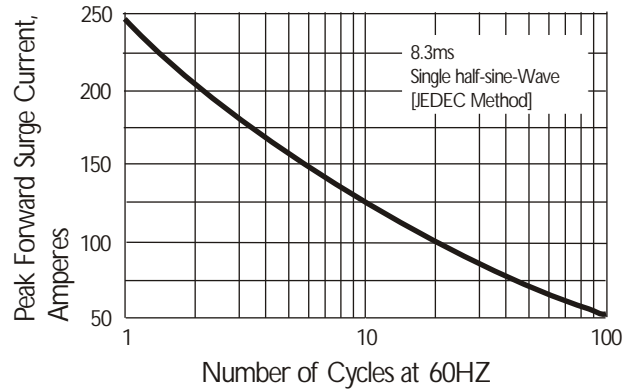
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**Rating and Characteristic Curves** (  $T_A=25^{\circ}\text{C}$  Unless otherwise noted )

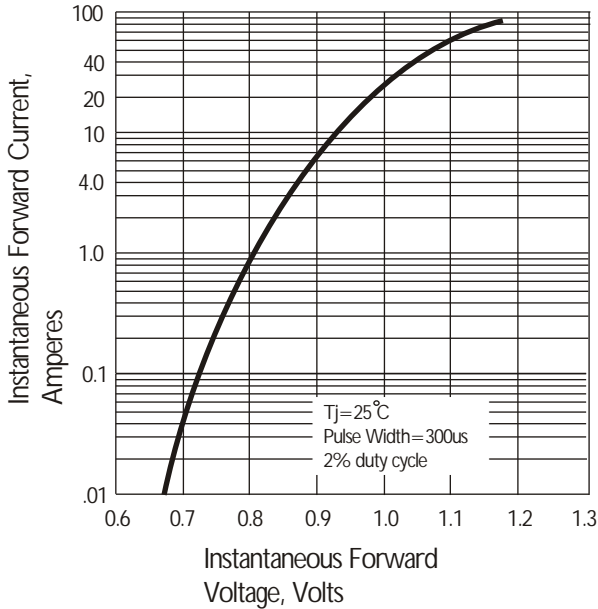
**Fig. 1 Derating Curve for Output Rectified Current**



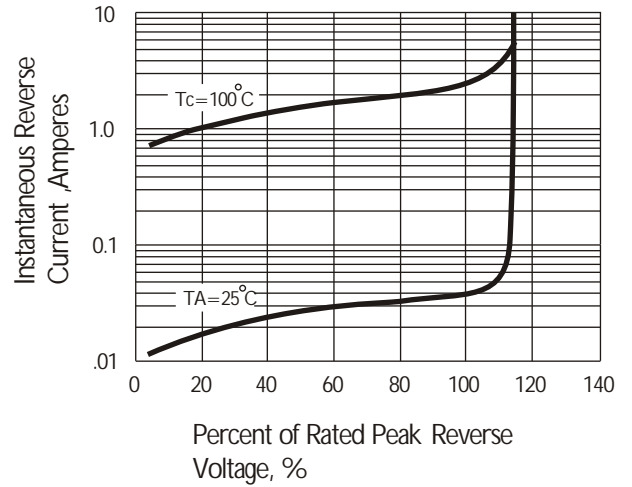
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristics**



**Fig. 5 Typical Junction Capacitance**

