

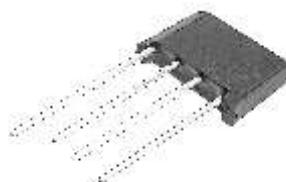


SEP ELECTRONIC CORP.

RS101 thru RS107

1.0 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V



Features

- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Ideal for printed circuit board mounting
- High surge current capability
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs (2.3kg) tension

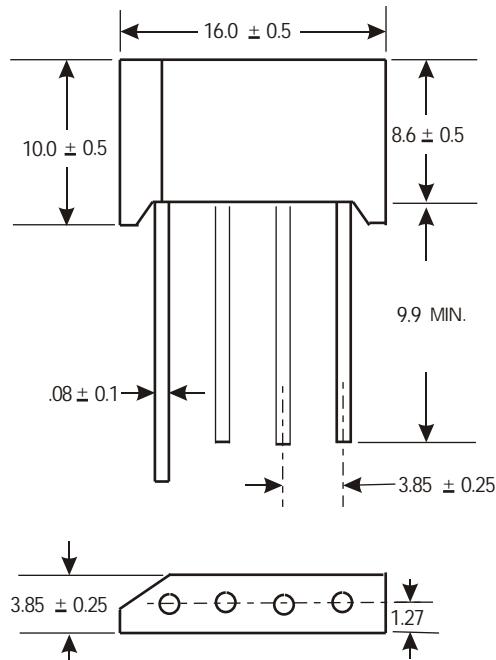
Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting Position: Any

Weight: 0.06 ounce, 1.52 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	RS101	RS102	RS103	RS104	RS105	RS106	RS107	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 TA=50°C	IF(AV)				1.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				30				A
Rating for fusing (t<8.3ms)	I ² t				10				A ² sec
Typical thermal resistance per element (1)	ReJA				50.0				°C / W
Typical junction capacitance per element (2)	C _j				24				pF
Operating junction and storage temperature range	T _J , T _{TSG}				-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	RS101	RS102	RS103	RS104	RS105	RS106	RS107	Unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF				1.0				V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =100°C	IR				10 500				μA

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

(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves ($T_A=25^\circ\text{C}$ Unless otherwise noted)
RS101 thru RS107

Fig. 1 Derating Curve for Output Rectified Current

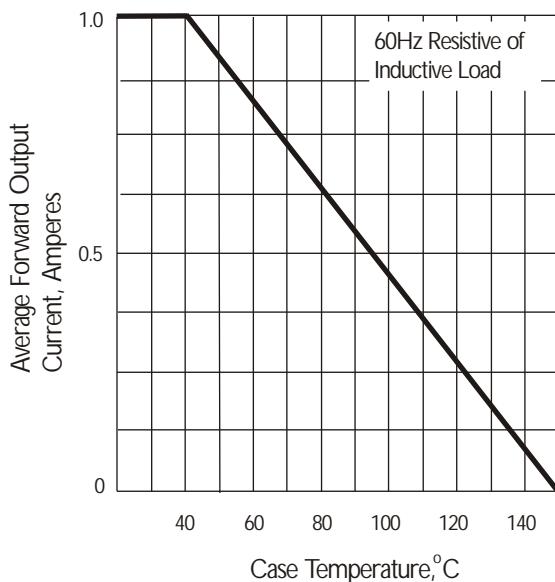


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

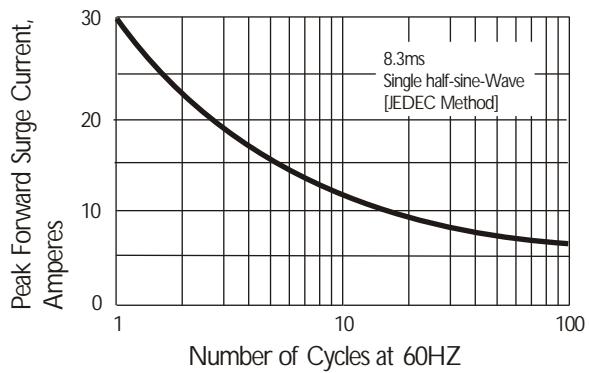


Fig. 3 Typical Instantaneous Forward Characteristics

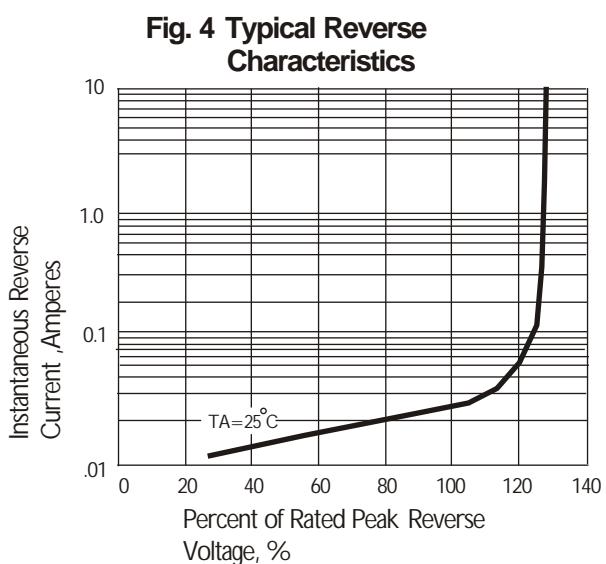
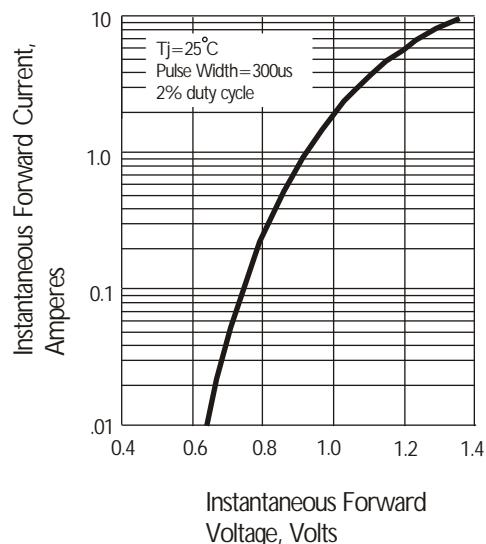


Fig. 5 Typical Junction Capacitance

