

# RS801 THRU RS807

## SINGLE-PHASE SILICON BRIDGE RECTIFIERS

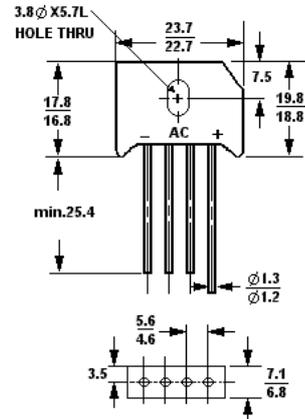
Reverse Voltage – 50 to 1000 Volts

Forward Current – 8.0 Amperes

### Features

- Low leakage
- Low forward voltage
- Mounting position: Any
- Surge overload rating: 250 amperes peak
- Ideal for printed circuit boards
- High forward surge current capability

### RS-8

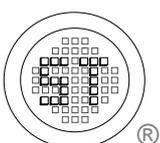


Dimensions in mm

### Absolute Maximum Ratings and Characteristics

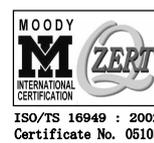
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbols	RS 801	RS 802	RS 803	RS 804	RS 805	RS 806	RS 807	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS bridge input voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at $T_C = 75^\circ C$ with heat sink	$I_O$	8							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	250							Amps
Maximum forward voltage drop per element at 8A DC	$V_F$	1.1							Volts
Maximum reverse current at rated DC blocking voltage per element	@ $T_A = 25^\circ C$	10							$\mu$ Amps
	@ $T_C = 100^\circ C$	0.2							mAmps
Operating and storage temperature range	$T_J, T_S$	-55 to +150							$^\circ C$



## SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116

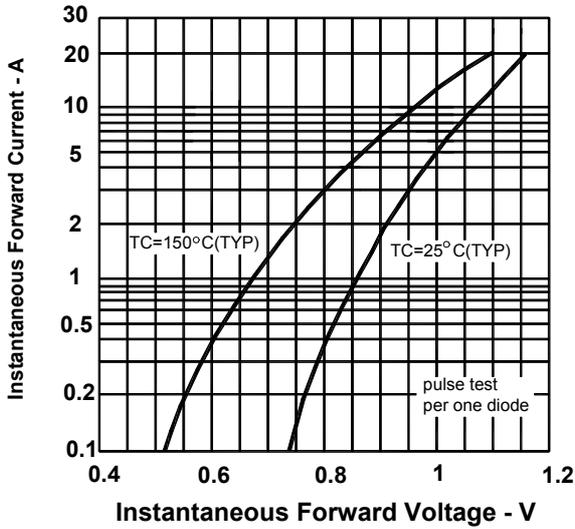


ISO 9001 : 2000  
Certificate No. 558-199-040-24

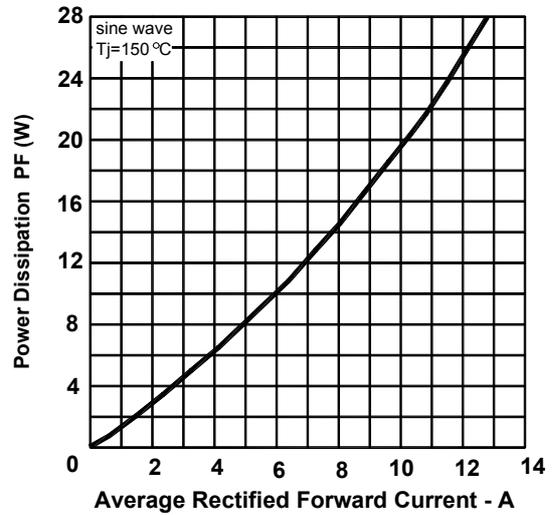
Dated : 09/01/2003

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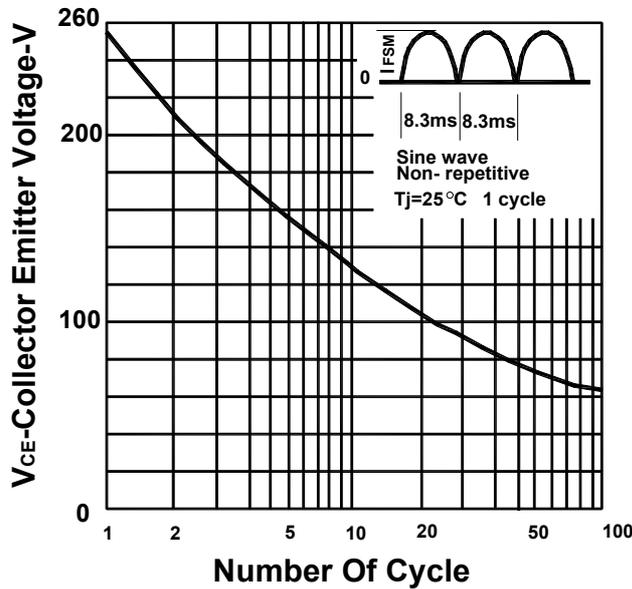
Typical Instantaneous Forward Characteristics



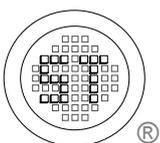
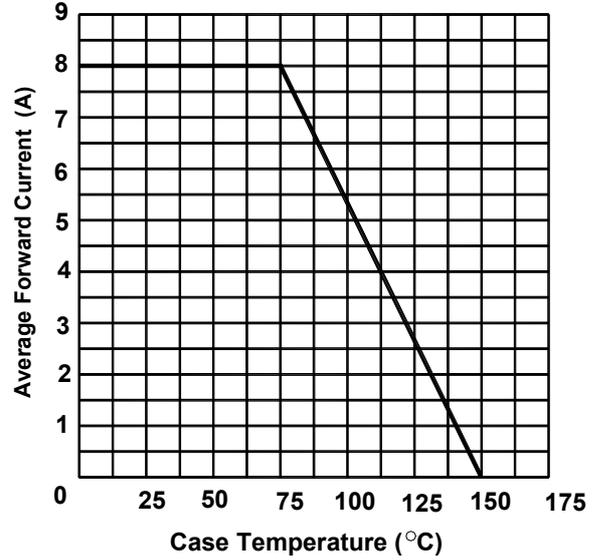
Power Dissipation



Surge Forward Current Capability

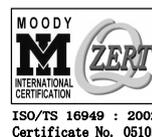


Typical Forward Current Derating Curve



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