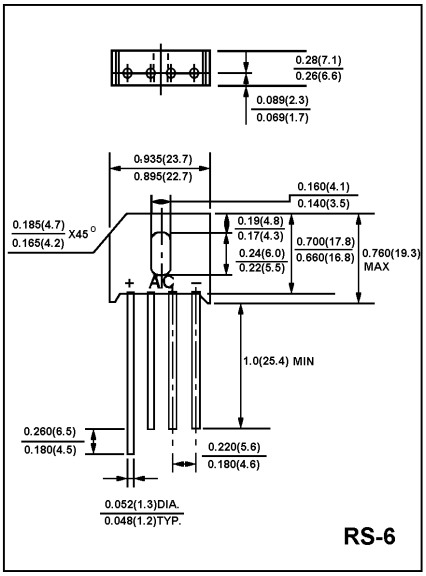
# MOSPEC

# RS801 THRU RS807

**SINGLE-PHASE BRIDGE RECTIFIER**
**VOLTAGE RANGE 50 to 1000 Volts**
**CURRENT 8.0 Ampere**




**FEATURES**

- ＊Low cost
- ＊High forward surge current capability
- ＊Ideal for printed circuit board
- ＊High temperature soldering guaranteed: 260°c/10 second,0.375”(9.5mm)lead length at 5 lbs. (2.3kg) tension.

**MECHANICAL DATA**

- ＊Case: Transfer molded plastic
- ＊Epoxy: UL94V-O rate flame retardant
- ＊Terminals：Lead Solderable Per MIL-STD-202Ｅ method 208C
- ＊Polarity：Polarity symbols marked on case
- ＊Mounting :Thru hole for #6 screw, 5 in,-lbs.Torqute Max.
- ＊Weight： 0.27 ounce, 7.59 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARATERISTICS

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

| Characteristic | | Symbol | RS801 | RS802 | RS803 | RS804 | RS805 | RS806 | RS807 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | | $V_{RRM}$<br>$V_{RWM}$<br>$V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectifier Forward Current at | $T_C$=100℃ | $I_{O(AV)}$ | 8.0 | | | | | | | A |
| | $T_A$=45℃(Note 3) | | 6.0 | | | | | | | |
| Non-Repetitive Peak Surge Current<br>8.3 ms Single half sine-wave superimposed on rated load | | $I_{FSM}$ | 150 | | | | | | | A |
| Forward Voltage (per element) ( $I_F$ =8.0 Amp) | | $V_{FM}$ | 1.0 | | | | | | | V |
| Peak Reverse Current at rated DC blocking voltage per element | $T_A$ = 25℃ | $I_R$ | 10 | | | | | | | uA |
| | $T_A$ = 100℃ | | 1.0 | | | | | | | mA |
| $I^2$ t Rating for Fusing( t<8.3ms) | | $I^2t$ | 93 | | | | | | | $A^2s$ |
| Typical Junction Capacitance per element (Note1) | | $C_J$ | 105 | | | | | | | pF |
| Typical Thermal Resistance (per leg)(note 2) | | $R_{\theta jc}$ | 5.0 | | | | | | | °C/W |
| Operating and Storage Temperature Range | | $T_J$ , $T_{stg}$ | -65 to +150 | | | | | | | ℃ |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Unit mounted on 3.0”×3.0”×0.11” thick (7.5×7.5×0.3 cm ) Al. plate.
3. Unit mounted in free air, no heatsink, P.C.B. at 375”(9.5mm) lead length with. 5”×5”(12×12 mm) copper pads..

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FIG-1 FORWARD CURRENT DERATING CURVE

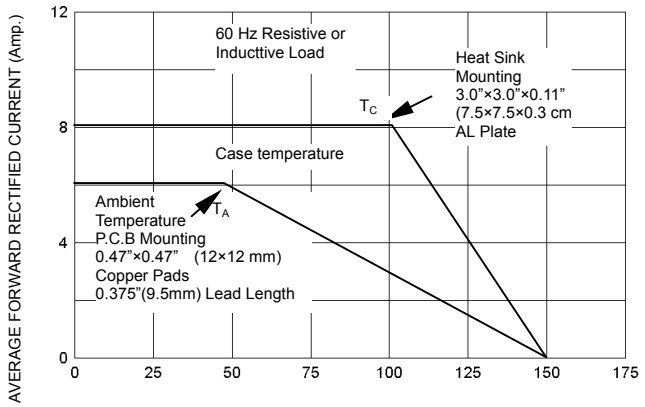



FIG-2 TYPICAL FORWARD CHARACTERISITICS

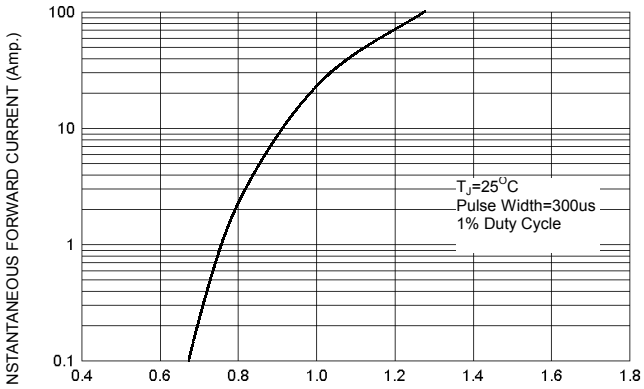



FIG-3 PEAK FORWARD SURGE CURRENT

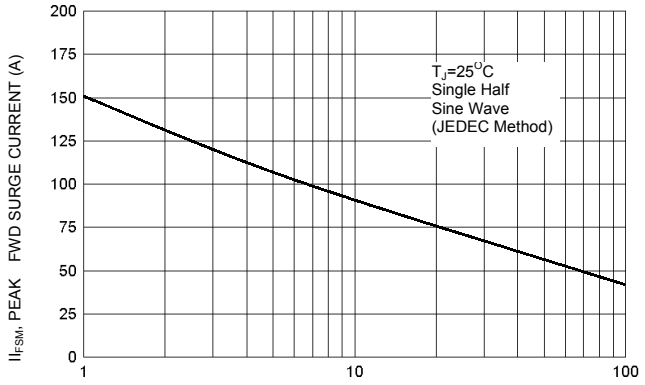



FIG-4 TYPICAL JUNCTION CAPACITANCE

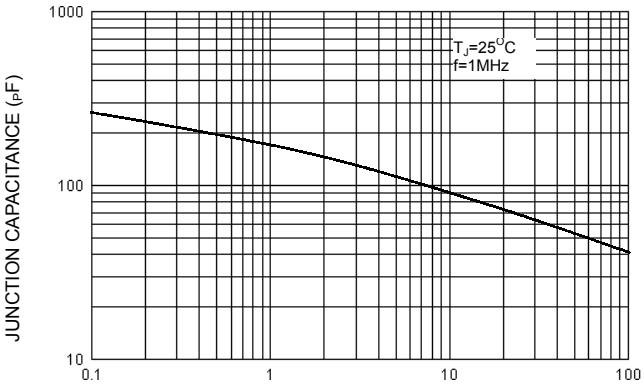
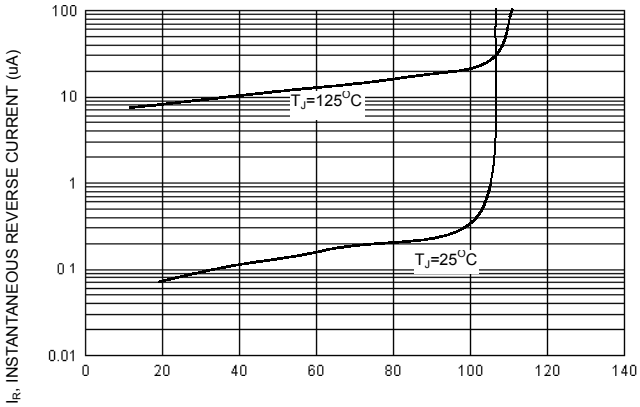



FIG-5 TYPICAL REVERSE CHARACTERISTICS



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