# WILLAS

RoHS COMPLIANT

## 2.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIERS

## RS-1 PACKAGE

# RS201-01 THRU RS207-01

### FEATURES

* Ideal for printed circuit board
* Surge overload rating: 60 amperes peak
* Mounting position: Any
* Glass Passivated chip Junctions
* RoHS product for packing code suffix "G"
  Halogen free product for packing code suffix "H"

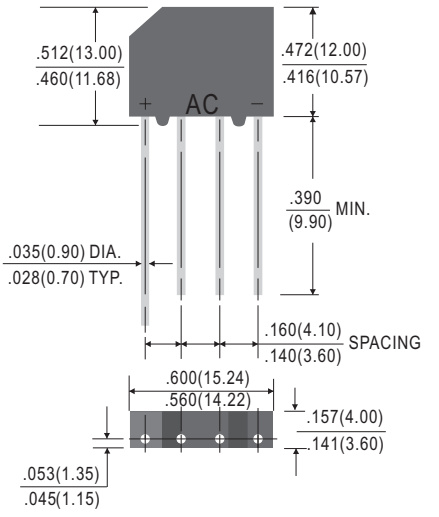
### MECHANICAL DATA

* UL listed the recognized component directory, file #E195711
* Epoxy: Device has UL flammability classification 94V-O
* Weight: 1.635 grams Approximated

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

**RS-1**




Dimensions in inches and (millimeters)

**MAXIMUM RATINGS** (At $T_A$ = 25°C unless otherwise noted)

| RATINGS | SYMBOL | RS201 | RS202 | RS203 | RS204 | RS205 | RS206 | RS207 | 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 Output Current $T_A$ = 50°C | $I_O$ | 2.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$ | 60 | | | | | | | Amps |
| Typical Thermal Resistance (Note 1) | $R_{\theta JC}$ | 15 | | | | | | | °C/W |
| | $R_{\theta JA}$ | 30 | | | | | | | |
| Operating Temperature Range | $T_J$ | -55 to + 150 | | | | | | | °C |
| Storage Temperature Range | $T_{STG}$ | -55 to + 150 | | | | | | | °C |
| Typical Junction Capacitance (Note 2) | $C_J$ | 15 | | | | | | | pF |

**ELECTRICAL CHARACTERISTICS** (At $T_A$ = 25°C unless otherwise noted)

| CHARACTERISTICS | | SYMBOL | RS201 | RS202 | RS203 | RS204 | RS205 | RS206 | RS207 | UNITS |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Forward Voltage Drop per Bridgeat Element at 2.0A DC | | $V_F$ | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at Rated Dc Blocking Voltage per element | @$T_A$ = 25°C | $I_R$ | 10 | | | | | | | uAmps |
| | @$T_A$ = 100°C | | 0.5 | | | | | | | mAmps |

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts

WILLAS

RoHS COMPLIANT

# RS201-01 THRU RS207-01

## 2.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIERS

## RS-1 PACKAGE

## RATING AND CHARACTERISTIC CURVES

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

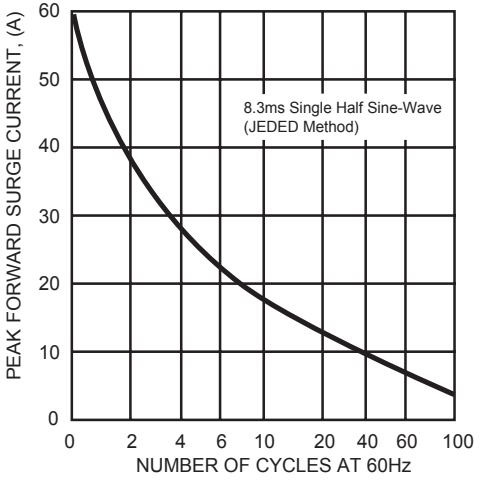



FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

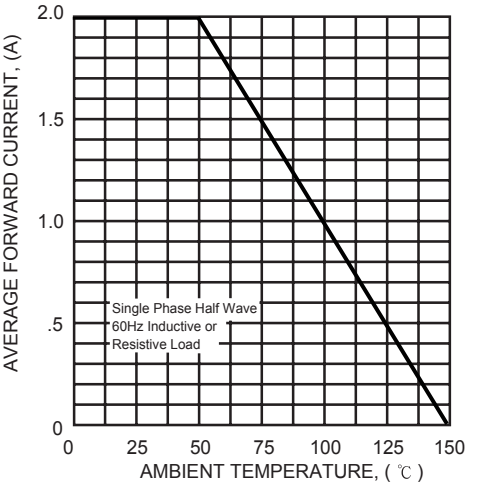



FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

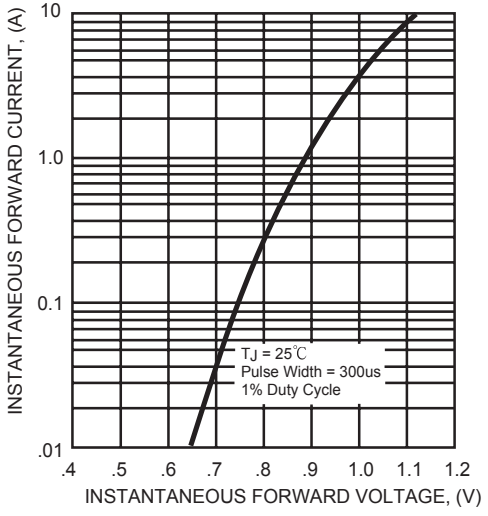
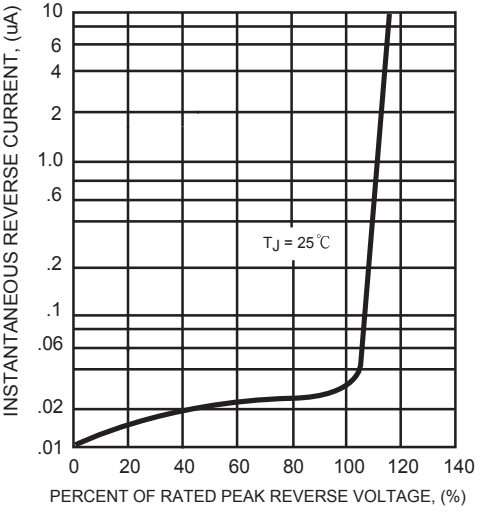



FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



## Ordering Information:

| Device PN | Packing |
|---|---|
| Part Number G(1)-WS | Bulk Pack :900pcs/box; 14,400pcs/Carton |

Note: 1. RoHS product for packing code suffix "G", Halogen free product for packing code suffix "H" .

*****Disclaimer*****

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.