

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

FEATURES

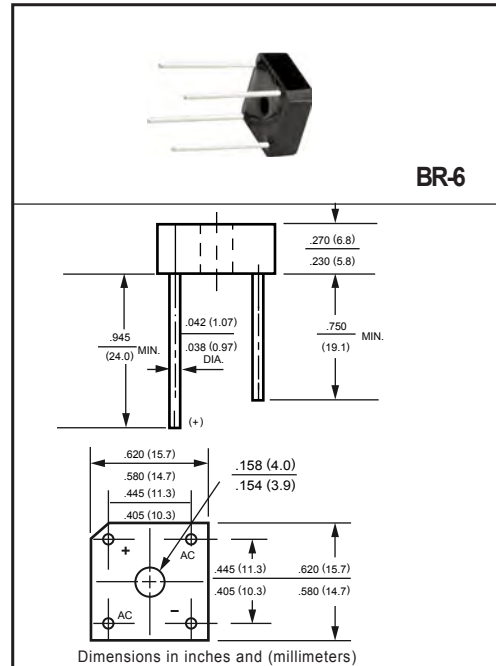
- * Surge overload rating :175 amperes peak
- * Low forward voltage drop
- * Small size :simple installation
- * Mounting position: Any
- * Mounting: Hole thru for #6 screw
- * Mounting Torque : 8 KgF/cm(max.)
- * Recommended Torque : 6 KgF/cm

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O
- * UL list the recognized component directory, file #E94233

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

| RATINGS | SYMBOL | BR605 | BR61 | BR62 | BR64 | BR66 | BR68 | BR610 | UNITS |
|---|-----------------------------------|--------------|------|------|------|------|------|-------|---------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS 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 Current at T _C = 75 °C (with heat sink) | I _O | 6.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 175 | | | | | | | Amps |
| Current Squared Time | I ² t | 127 | | | | | | | A ² /Sec |
| Typical Thermal Resistance (Note 1) | R _{θJC} | 7.3 | | | | | | | °C/W |
| | R _{θJA} | 25 | | | | | | | |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | | | | | | | °C |

ELECTRICAL CHARACTERISTICS (@ TA=25 °C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | BR605 | BR61 | BR62 | BR64 | BR66 | BR68 | BR610 | UNITS |
|---|--------------------------|-------|------|------|------|------|------|-------|-------|
| Maximum Instantaneous Forward Voltage at 3.0A DC | V _F | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @ T _A = 25°C | 5.0 | | | | | | | uAmps |
| | @ T _A = 150°C | 10 | | | | | | | mAmps |

- NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. "RoHS compliant"
3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

RATING AND CHARACTERISTICS CURVES (BR605 THRU BR610)

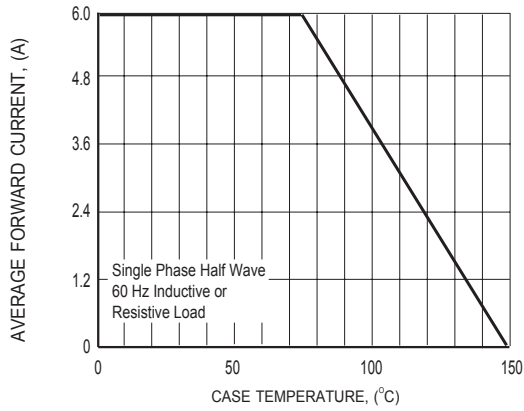


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

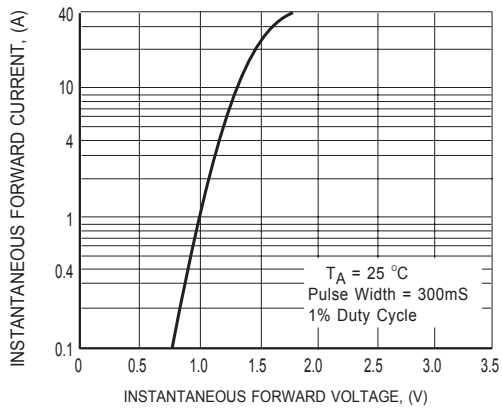


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

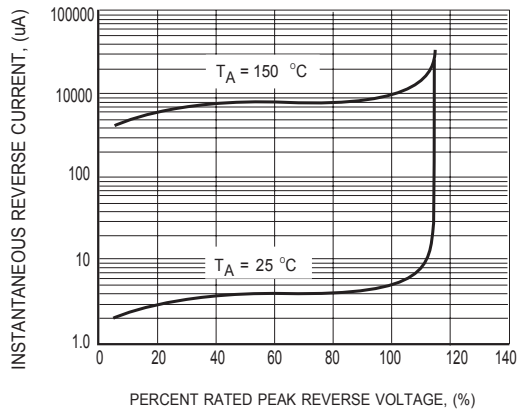


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

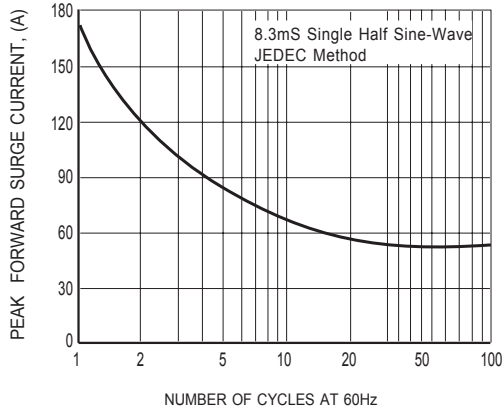

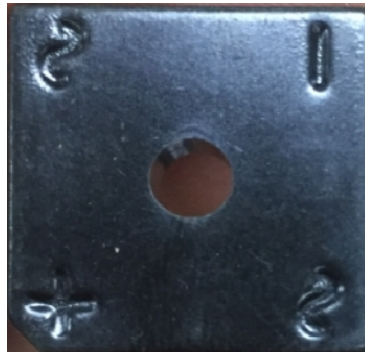


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Marking Description

Rectron Logo →  **BR6** ← Part No.

UL Logo →  **VYWW**
Year – code → **Y** (Y: Last digit of year)
Week-code (WW: 01~52) → **WW**



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|------------|------------------------|---------------------|---------------|---------------------|
| BR-3/-6 | -B | 200 | 206*208*55 | 450*220*255 | 2,000 | 7.50/8.50 |

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