

BR605 THRU BR610

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

FEATURES

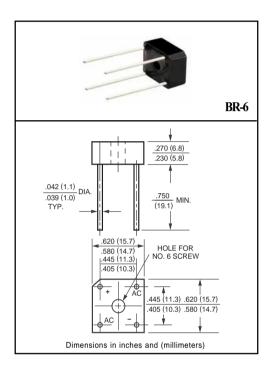
- * Surge overload rating: 125 amperes peak
- * Low forward voltage drop
- * Small size: simple installation
- * Mounting position: Any
- * Mounting: Hole thru for # 6 screw

MECHANICAL DATA

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

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%.



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

| RATINGS | SYMBOL | BR605 | BR61 | BR62 | BR64 | BR66 | BR68 | BR610 | UNITS |
|---|--------|--------------|------|------|------|------|------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Output Current at Tc = 75°C | lo | 6.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave | 125 | | | | | | | Amps | |
| superimposed on rated load (JEDEC method) | IFSM | 125 | | | | | | | |
| Operating Temperature Range | TJ | -55 to + 125 | | | | | | | ٥C |
| Storage Temperature Range | Tstg | -55 to + 150 | | | | | | | ٥C |

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

| CHARACTERISTICS | | SYMBOL | BR605 | BR61 | BR62 | BR64 | BR66 | BR68 | BR610 | UNITS |
|---|-------------|--------|-------|------|------|------|------|------|-------|-------|
| Maximum Forward Voltage Drop per element at 3.0A DC | | VF | 1.0 | | | | | | | Volts |
| Maximum Reverse Current at Rated | @TA = 25°C | - IR | | | | 10 | | | | uAmps |
| DC Blocking Voltage per element | @Tc = 100°C | | | | | 0.2 | | | | mAmps |

RATING AND CHARACTERISTIC CURVES (BR605 THRU BR610)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 8.3ms Single Half Sine-Wave

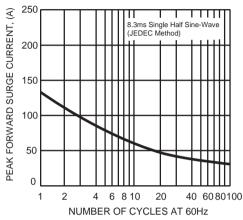




FIG. 2 - TYPICAL FORWARD CURRENT

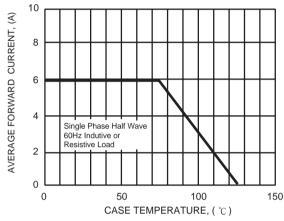


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

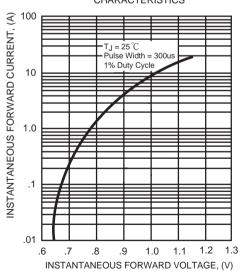


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

