



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

BR1505L
THRU
BR1510L

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts
CURRENT - 15 Amperes

FEATURES

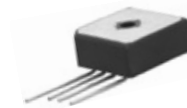
- * Plastic case with heatsink for Maximum Heat Dissipation
- * Diffused Junction
- * High current capability
- * Surge overload ratings - 300 Amperes
- * Low forward voltage drop
- * High Reliability
- * Designed for saving mounting space

MECHANICAL DATA

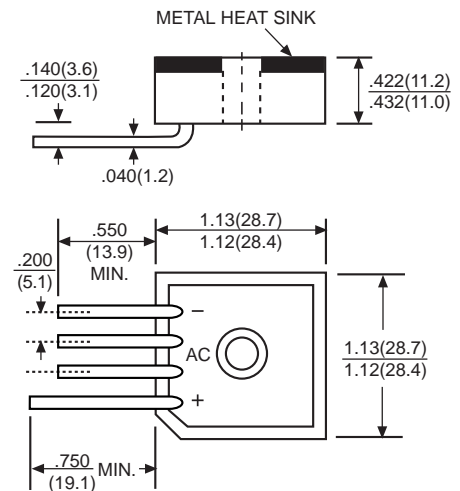
- * Case: Molded plastic with heatsink
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 30 grams

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%.



BR-25L



Dimensions in inches and (millimeters)

| | SYMBOL | BR1505L | BR151L | BR152L | BR154L | BR156L | BR158L | BR1510L | 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 = 55°C | I _o | 15 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 300 | | | | | | | Amps |
| Maximum Forward Voltage Drop per element at 7 .5A DC | V _F | 1.2 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated | I _R | 10 | | | | | | | μAmps |
| DC Blocking Voltage per element | | 1000 | | | | | | | |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 374 | | | | | | | A ² Sec |
| Typical Junction Capacitance (Note1) | C _J | 300 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | R _{θJC} | 2.0 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _J ,T _{STG} | -55 to +150 | | | | | | | °C |

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance from Junction to Case per leg.

RATING AND CHARACTERISTIC CURVES (BR1505L THRU BR1510L)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

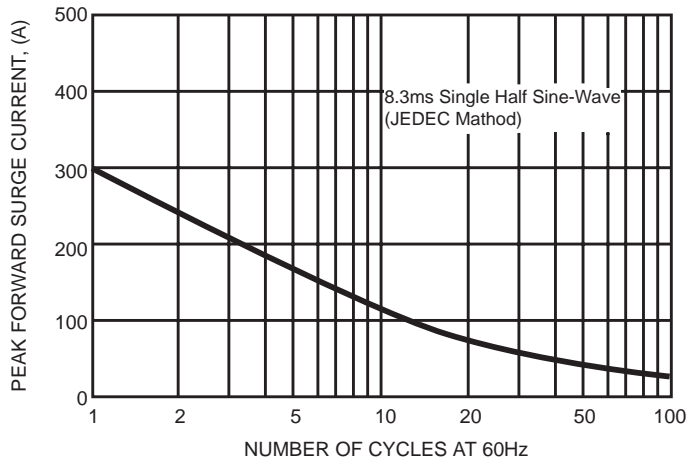


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

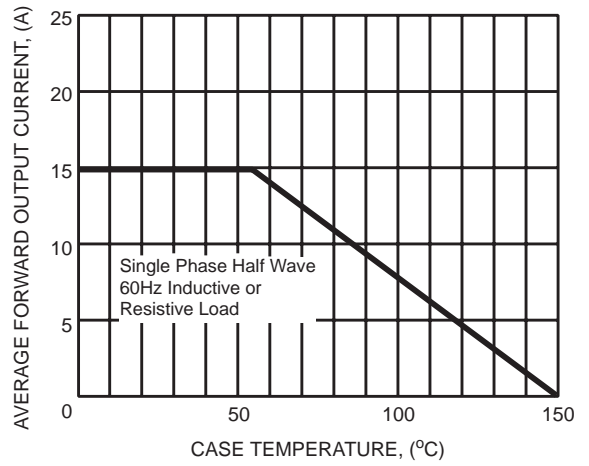


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

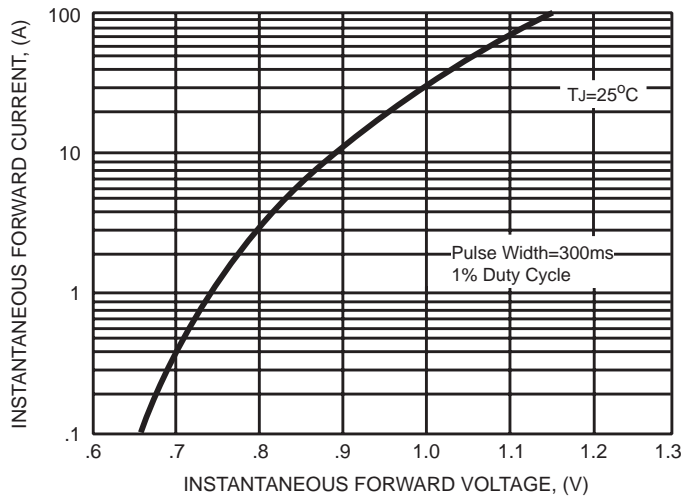
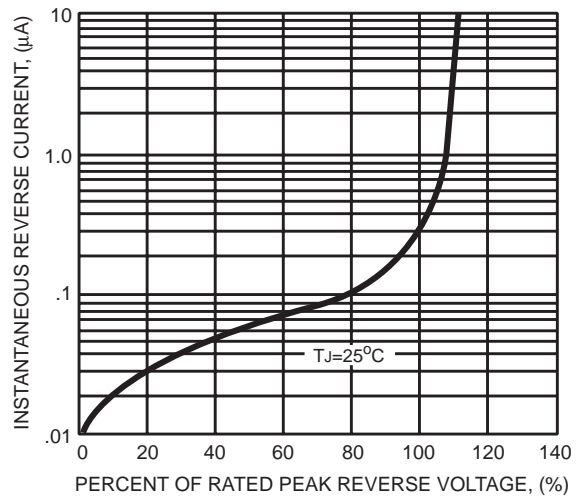


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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