

S15VB20 ~ S15VB60

PRV : 200 ~ 600 Volts

Io : 15 Amperes

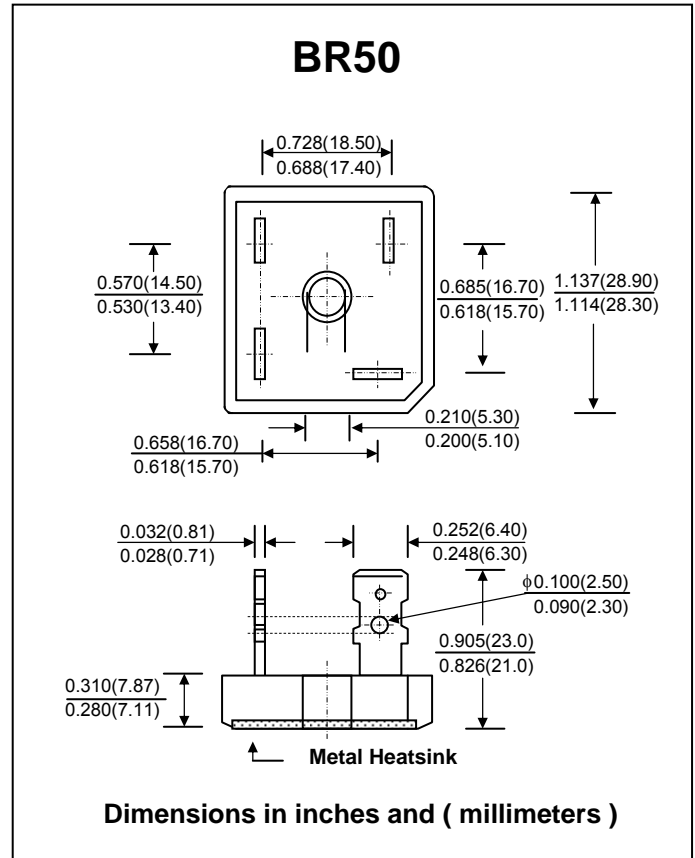
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : Molded plastic with heatsink integrally mounted in the bridge encapsulation
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : plated .25" (6.35 mm). Faston
- * Polarity : Polarity symbols marked on case
- * Mounting position : Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency.
- * Weight : 17.1 grams

SILICON BRIDGE RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

| RATING | SYMBOL | S15VB20 | S15VB60 | UNIT |
|---|-----------------------------|---------------|---------|------------------|
| Maximum Reverse Voltage | V _{RM} | 200 | 600 | V |
| Maximum Average Forward Current T _c = 83°C | I _{F(AV)} | 15 | | A |
| Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method) | I _{FSM} | 200 | | A |
| Current Squared Time at 2ms ≤ t < 10 ms. T _c = 25 °C | I ² _t | 200 | | A ² S |
| Maximum Forward Voltage per Diode at I _F = 7.5 A | V _F | 1.05 | | V |
| Maximum DC Reverse Current at V _R = V _{RRM} (Pulse Measurement, Rating of per diode) | I _R | 10 | | μA |
| Typical Thermal Resistance (Note 1) | R _{θJC} | 2.3 | | °C/W |
| Operating Junction Temperature Range | T _J | 150 | | °C |
| Storage Temperature Range | T _{STG} | - 40 to + 150 | | °C |

Notes :

1. Thermal Resistance from junction to case with units mounted on a 5" x 4" x 3" (12.7cm.x 10.2cm.x 7.3cm.) Al.-Finned Plate

RATING AND CHARACTERISTIC CURVES (S15VB20 ~ S15VB60)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

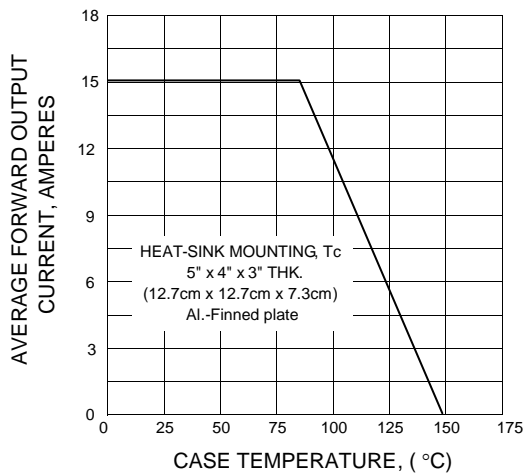


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

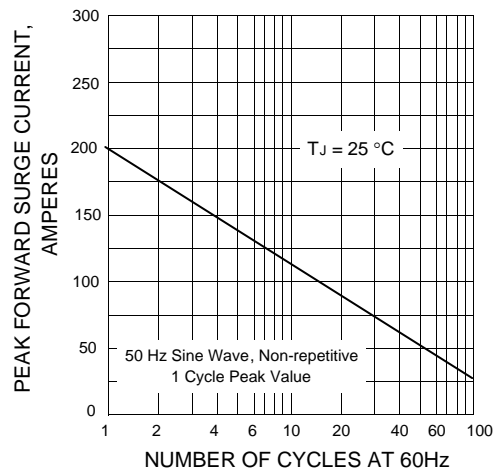


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

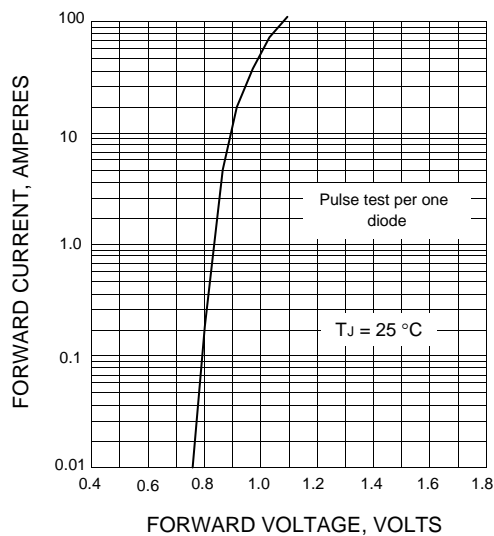


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

