

S15VB20 ~ S15VB60

PRV : 200 ~ 600 Volts

Io : 15 Amperes

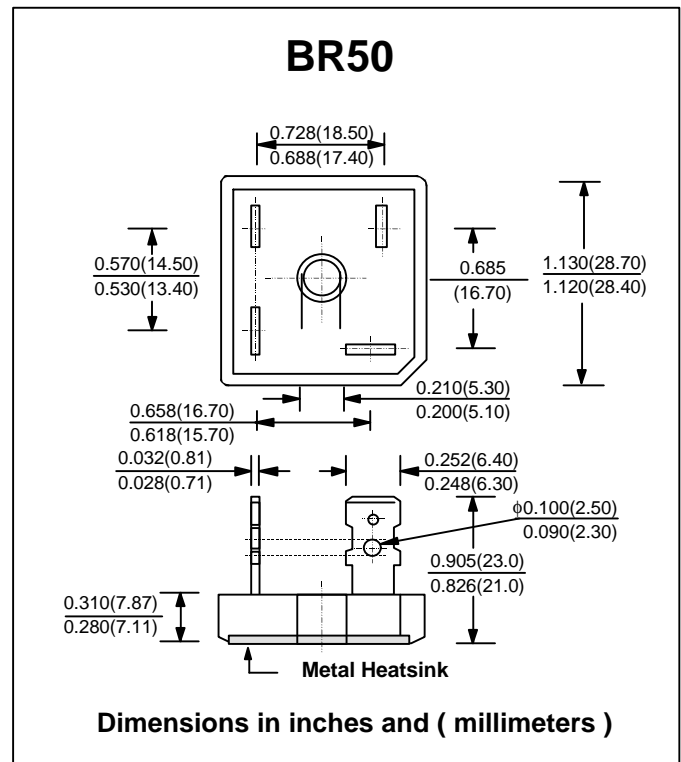
FEATURES :

- * 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 RECTIFIER



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 $T_c = 83^\circ\text{C}$	$I_{F(AV)}$	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 $2\text{ms} \leq t < 10\text{ms}$. $T_c = 25^\circ\text{C}$	I^2_t	200		A^2S
Maximum Forward Voltage per Diode at $I_F = 7.5\text{A}$	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)	$R_{\theta JC}$	2.3		$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 40 to + 150		$^\circ\text{C}$

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

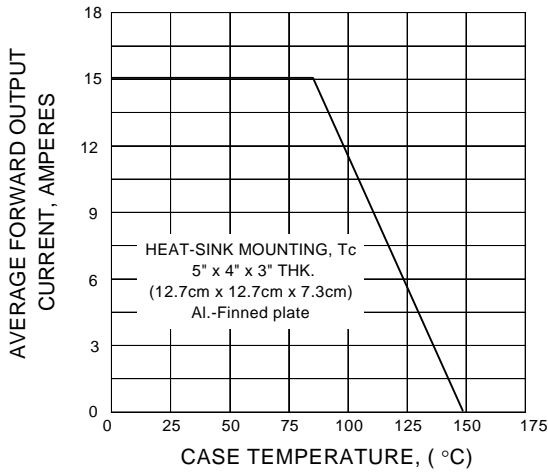


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

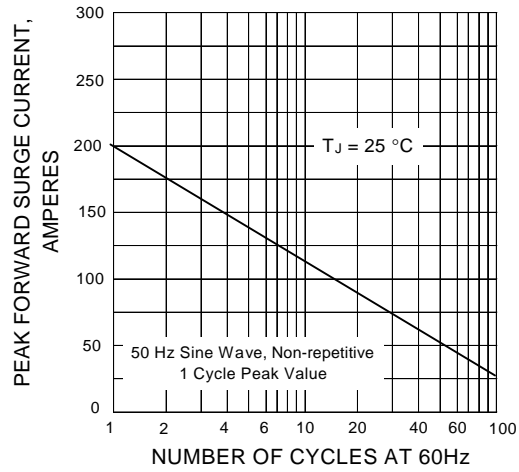


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

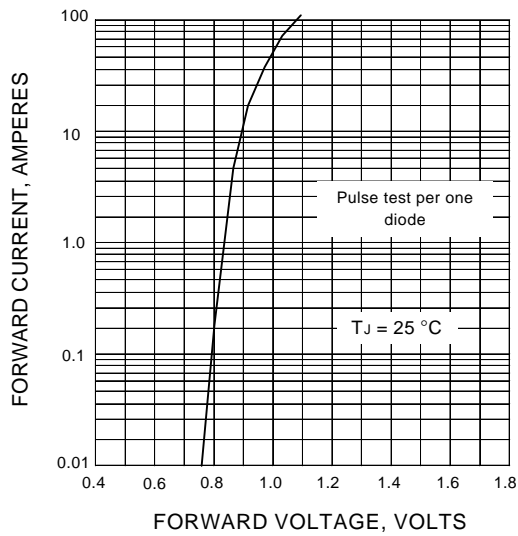


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

