

S25VB20 ~ S25VB60

SILICON BRIDGE RECTIFIERS

PRV : 200 ~ 600 Volts

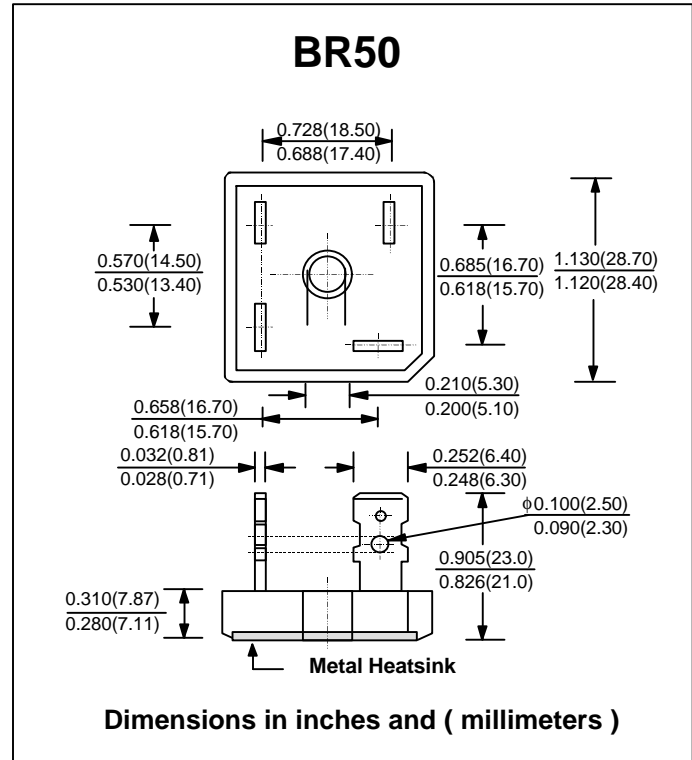
I_o : 25 Amperes

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



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 = 85°C	I _{F(AV)}	25		A
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	400		A
Current Squared Time at 1ms ≤ t < 10 ms.	I ² _t	800		A ² S
Maximum Forward Voltage per Diode at I _F = 12.5 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}	1.5		°C/W
Operating Junction Temperature Range	T _J	150		°C
Storage Temperature Range	T _{STG}	- 40 to + 150		°C

Note :

1. Thermal Resistance from junction to case with units mounted on a 5" x 6" x 4.9" (12.8cm.x 15.2cm.x 12.4cm.) Al.-Finned Plate

RATING AND CHARACTERISTIC CURVES (S25VB20 ~ S25VB60)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

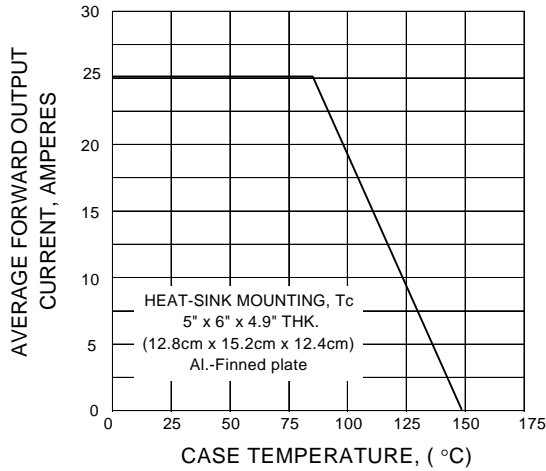


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

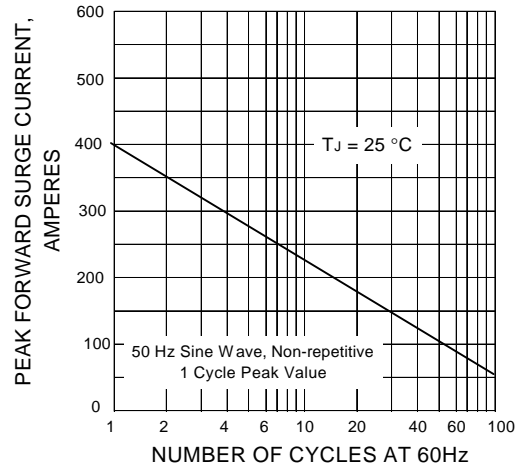


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

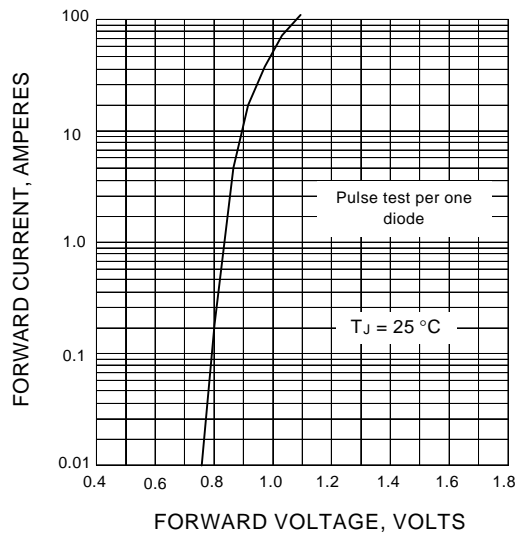


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

