

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

S25VB20 ~ S25VB60

PRV : 200 ~ 600 Volts

Io : 25 Amperes

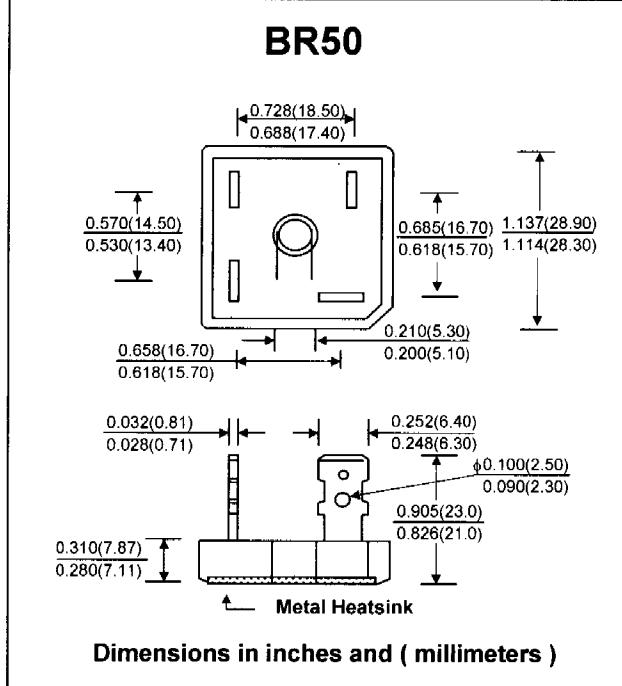
FEATURES :

- * 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

SILICON BRIDGE RECTIFIERS



Dimensions in inches and (millimeters)

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%.

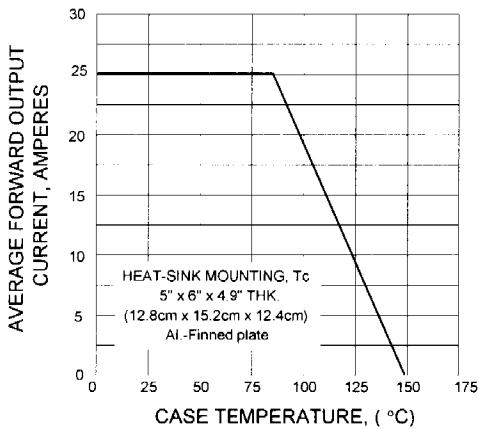
RATING	SYMBOL	S25VB20	S25VB60	UNIT
Maximum Reverse Voltage	V _{RM}	200	600	V
Maximum Average Forward Current T _C = 85°C	I _{F(AV)}	25		A
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	400		A
Current Squared Time at 1ms ≤ t < 10 ms.	I ² t	800		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 :

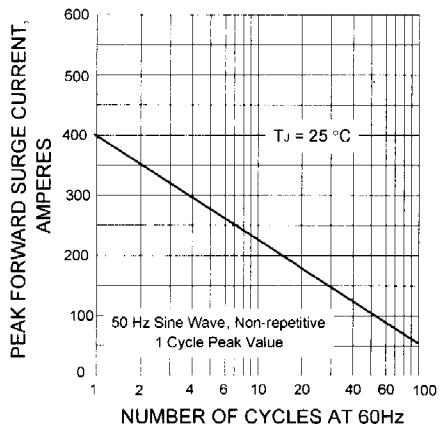
1. Thermal Resistance from junction to case with units mounted on a 5" x 6" x 4.9" (12.8cm.x 15.2cm.x 12.4cm.) Al.-Finned Plate

RATING AND CHARACTERISTIC CURVES (S25VB20 ~ S25VB60)

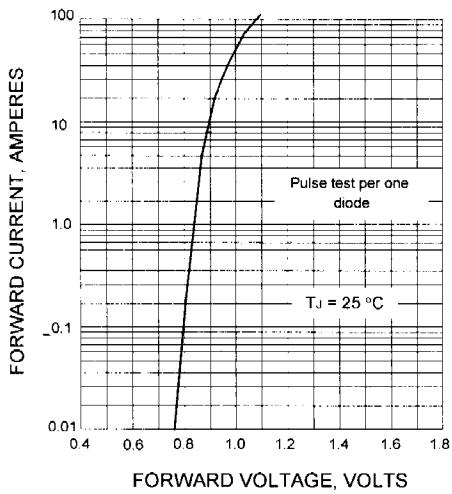
**FIG.1 - DERATING CURVE FOR OUTPUT
RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS
PER DIODE**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS
PER DIODE**

