

## D25XB80

**PRV : 800 Volts**

**I<sub>o</sub> : 25 Amperes**

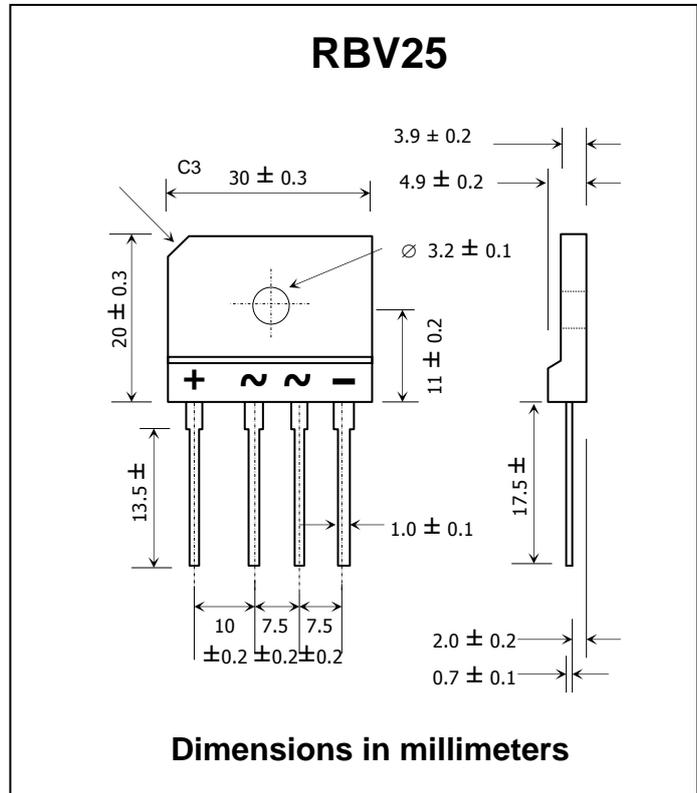
### FEATURES :

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

### MECHANICAL DATA :

- \* Case : Reliable low cost construction utilizing molded plastic technique
- \* Epoxy : UL94V-O rate flame retardant
- \* Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Polarity symbols marked on case
- \* Mounting position : Any

## SILICON BRIDGE RECTIFIERS



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

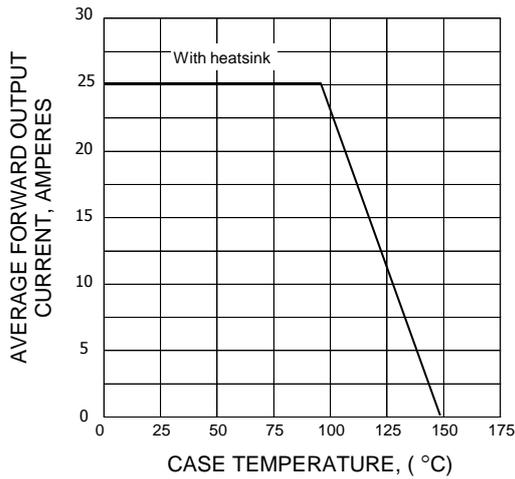
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

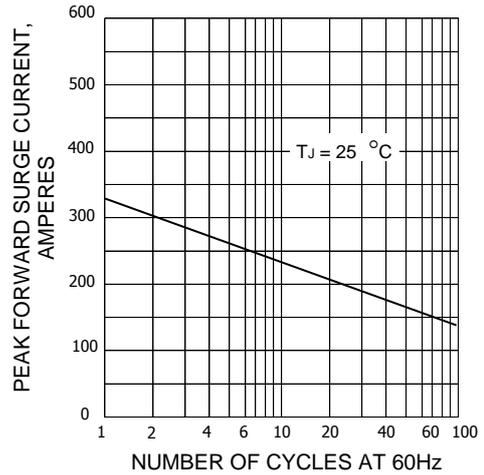
RATING	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	800	V
Maximum RMS Voltage	$V_{RMS}$	560	V
Maximum DC Blocking Voltage	$V_{DC}$	800	V
Maximum Average Forward Current 60 Hz sine wave, R-load	$I_{F(AV)}$	25 (With heatsink, $T_c = 87^\circ\text{C}$ ) 3.5 (Without heatsink, $T_a = 25^\circ\text{C}$ )	A
Peak Forward Surge Current, 60Hz sine wave Non-repetitive 1 cycle peak value, $T_j = 25^\circ\text{C}$	$I_{FSM}$	320	A
Current Squared Time at $t < 8.3$ ms.	$I^2t$	424	A <sup>2</sup> S
Maximum Forward Voltage per Diode at $I_F = 12.5$ A	$V_F$	1.0	V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage	$I_R$	5	$\mu\text{A}$
Operating Junction Temperature Range	$T_J$	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 150	$^\circ\text{C}$

## RATING AND CHARACTERISTIC CURVES ( D25XB80 )

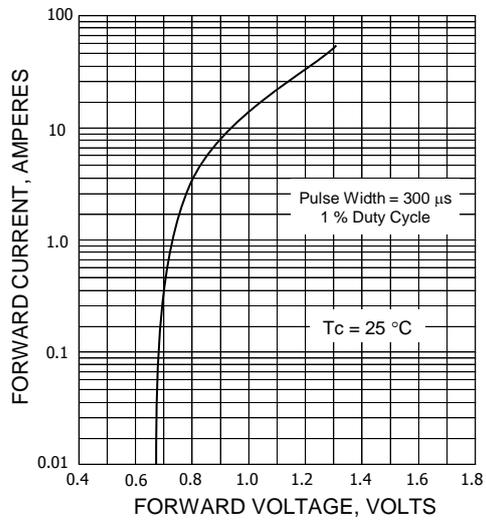
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



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



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

