

D15XB80

PRV : 800 Volts
Io : 15 Amperes

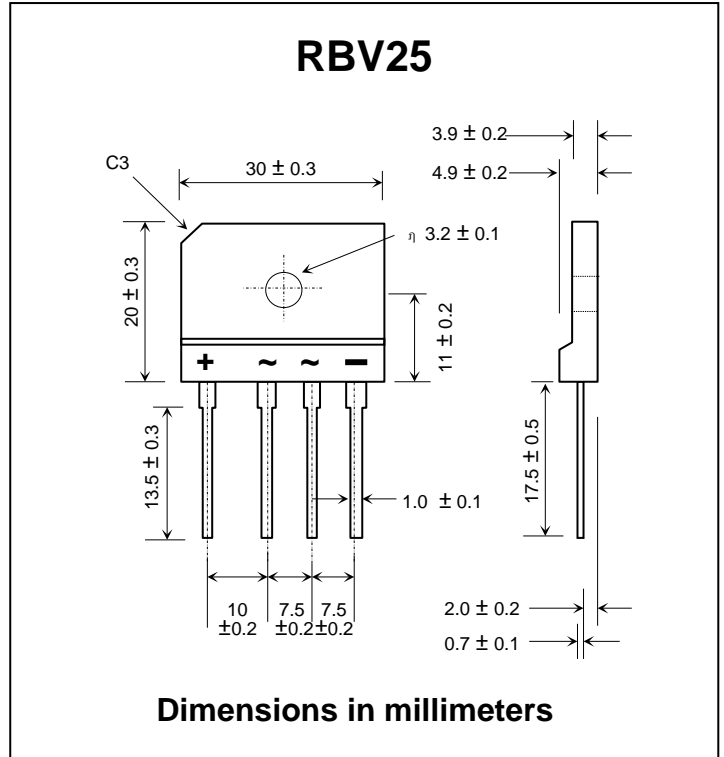
FEATURES :

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

MECHANICAL DATA :

- * Case : Reliable low cost construction utilizing molded plastic technique
- * Epoxy : UL94V-0 rate flame retardant
- * Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 7.7 grams

SILICON BRIDGE RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RM}	800	V
Maximum Average Forward Current (50Hz Sine wave, R-load)	I_O	15 3.2	A
Maximum Peak Forward Surge Current, $T_J = 25\text{ °C}$ (50Hz sine wave, Non-repetitive 1 cycle peak value)	I_{FSM}	200	A
Current Squared Time at $1\text{ms} \leq t < 10\text{ms}$, $T_C = 25\text{ °C}$	I^2t	110	A^2S
Maximum Forward Voltage per Diode at $I_F = 7.5\text{ A}$ (Pulse measurement, Rating of per diode)	V_F	1.1	V
Maximum DC Reverse Current, $V_R = V_{RM}$ (Pulse measurement, Rating of per diode)	I_R	10	μA
Maximum Thermal Resistance, Junction to case, With heatsink	$R_{\theta JC}$	1.5	$^{\circ}C/W$
Maximum Thermal Resistance, Junction to Ambient, Without heatsink	$R_{\theta JA}$	22	$^{\circ}C/W$
Maximum Thermal Resistance, Junction to Lead, Without heatsink	$R_{\theta JL}$	5	$^{\circ}C/W$
Operating Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature Range	T_{STG}	- 40 to + 150	$^{\circ}C$

RATING AND CHARACTERISTIC CURVES (D15XB80)

FIG.1 - DERATING CURVE

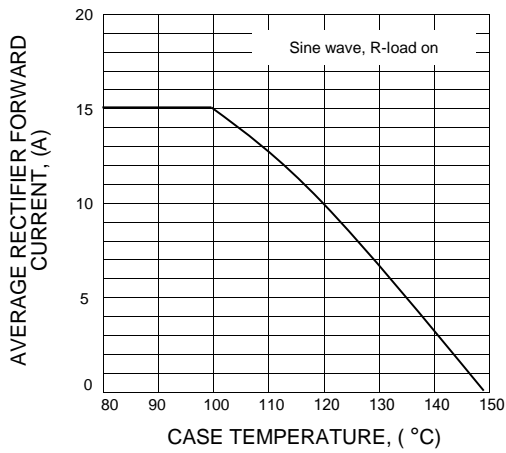


FIG.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

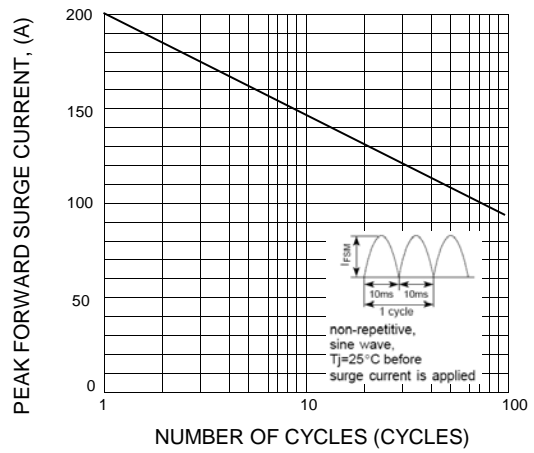


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

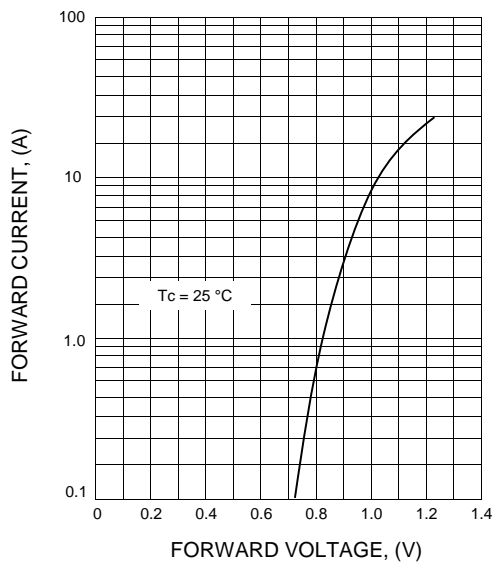


FIG.4 - POWER DISSIPATION

