

D25XB20 ~ D25XB60

PRV : 200 - 600 Volts

Io : 25 Amperes

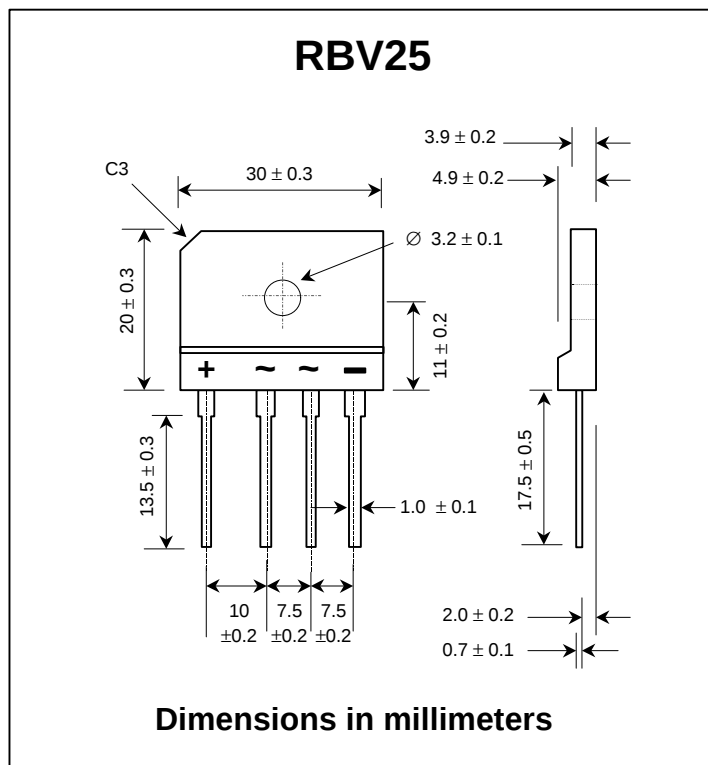
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board
- * 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
- * Weight : 7.7 grams

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	D25XB20	D25XB60	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	600	V
Maximum RMS Voltage	V_{RMS}	140	420	V
Maximum DC Blocking Voltage	V_{DC}	200	600	V
Maximum Average Forward Current 50 Hz sine wave, R-load	$I_{F(AV)}$	25 (With heatsink, $T_c = 98^\circ\text{C}$) 3.5 (Without heatsink, $T_a = 25^\circ\text{C}$)		A
Peak Forward Surge Current, 50Hz sine wave Non-repetitive 1 cycle peak value, $T_j = 25^\circ\text{C}$	I_{FSM}	350		A
Current Squared Time at $t < 8.3$ ms.	I^2t	300		A^2S
Maximum Forward Voltage per Diode at $I_F = 12.5$ A	V_F	1.05		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10		μA
	$I_{R(H)}$	200		μA
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.0		$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	- 40 to + 150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 40 to + 150		$^\circ\text{C}$

Note :

1. Thermal resistance from junction to case, With heat sink.

RATING AND CHARACTERISTIC CURVES (D25XB20 ~ D25XB60)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

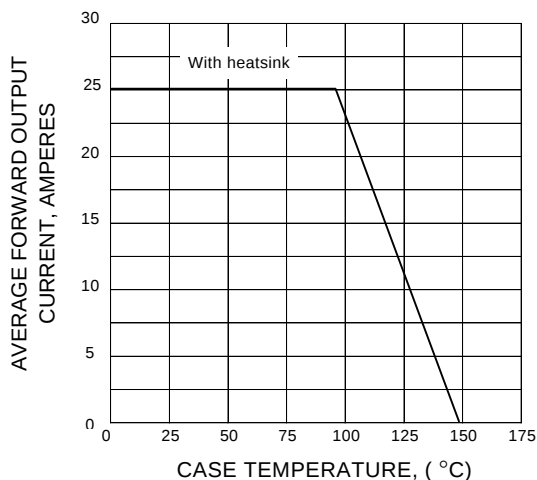


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

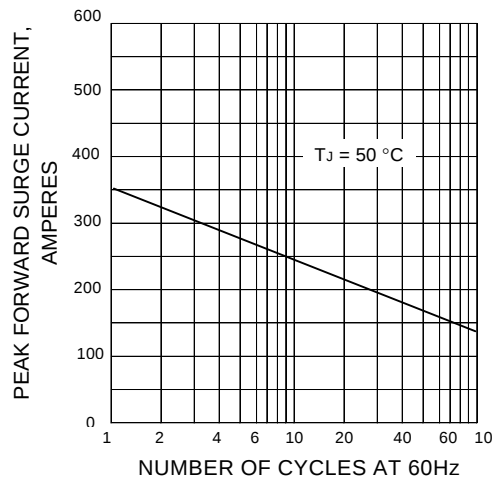


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

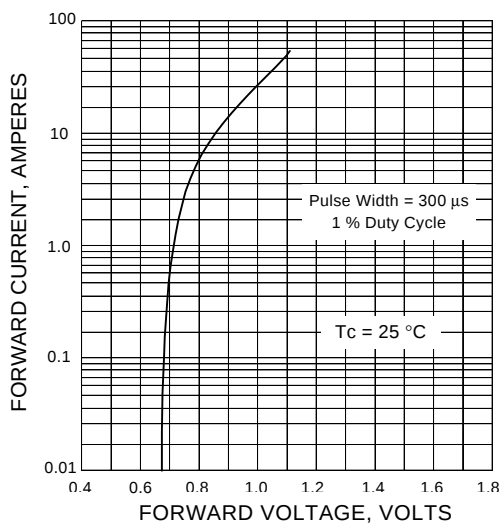


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

