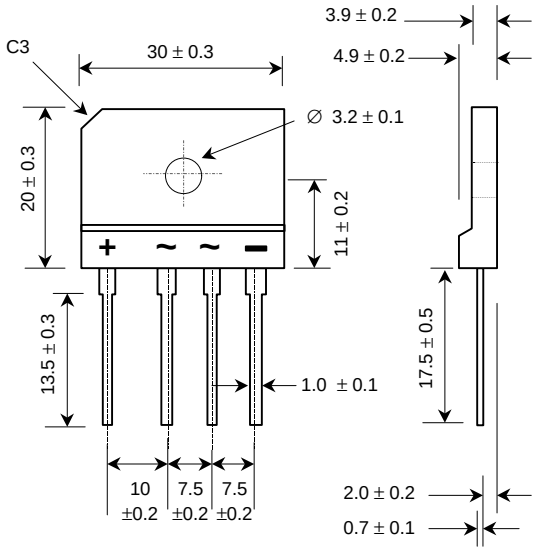
D25XB20 ~ D25XB60

SILICON BRIDGE RECTIFIERS

PRV : 200 - 600 Volts
Io : 25 Amperes

RBV25



Dimensions in millimeters

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

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	$I_{F(AV)}$	25 (With heatsink, Tc = 98°C)		A
50 Hz sine wave, R-load		3.5 (Without heatsink, Ta = 25°C)		
Peak Forward Surge Current, 50Hz sine wave Non-repetitive 1 cycle peak value, Tj = 25 °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 Ta = 25 °C	I_R	10		µA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	200		µA
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.0		°C/W
Operating Junction Temperature Range	T_J	- 40 to + 150		°C
Storage Temperature Range	T_{STG}	- 40 to + 150		°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

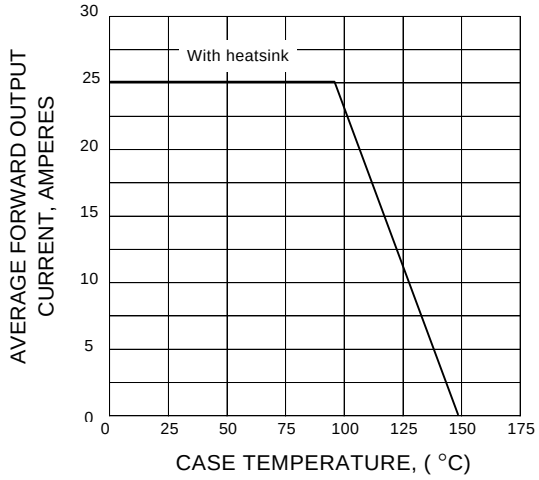


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

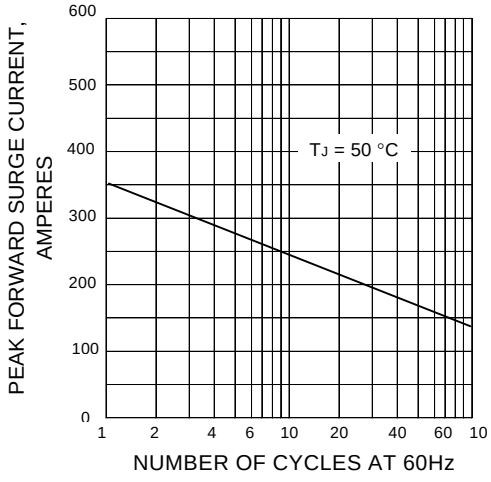


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

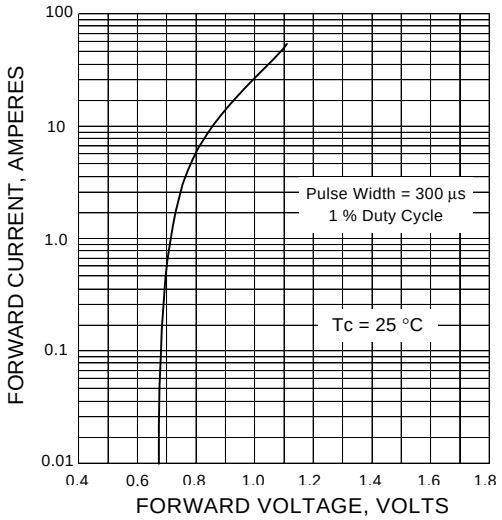


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE