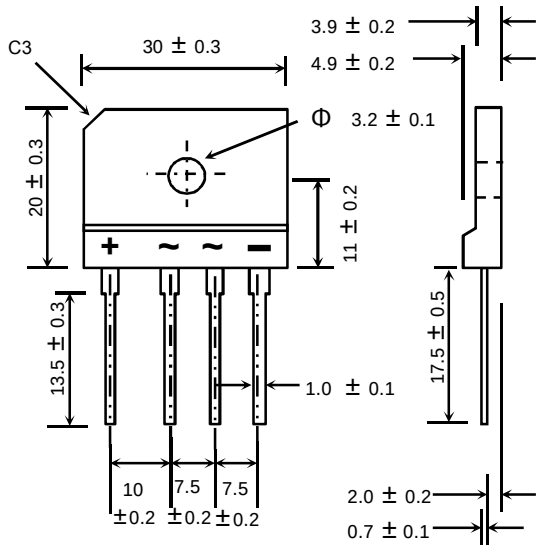
D20XB20 - D20XB60

SILICON BRIDGE RECTIFIERS

PRV : 200 - 600 Volts
Io : 20 Amperes

RBV25



Dimensions in millimeters

FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* High case dielectric strength of 2000 V_{AC} @1 Sec
* 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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	D20XB20	D20XB60	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 (50Hz Sine wave, R-load)	I_O	20 (With heatsink, Tc = 87°C) 3.5 (Without heatsink, Ta = 25°C)		A
Maximum Peak Forward Surge Current, Tj = 25°C (50Hz sine wave, Non-repetitive 1 cycle peak value)	I_{FSM}	240		A
Current Squared Time at 1ms ≤ t < 10 ms, Tc=25°C	I^2t	200		A^2S
Maximum Forward Voltage per Diode at I_F = 10 A	V_F	1.1		V
Maximum DC Reverse Current, V_R=V_{RRM} (Pulse measurement, Rating of per diode)	I_R	10		μA
Maximum Thermal Resistance, Junction to case	RθJC	1.5 (With heatsink)		°C/W
Maximum Thermal Resistance, Junction to Ambient	RθJA	22 (Without heatsink)		°C/W
Operating Junction Temperature	T_J	150		°C
Storage Temperature Range	T_{STG}	- 40 to + 150		°C

RATING AND CHARACTERISTIC CURVES (D20XB20 - D20XB60)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

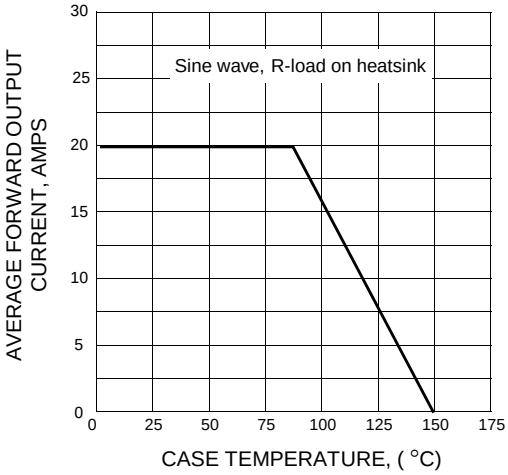


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

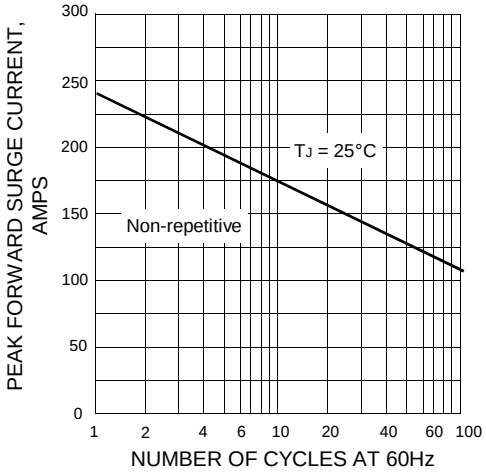


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

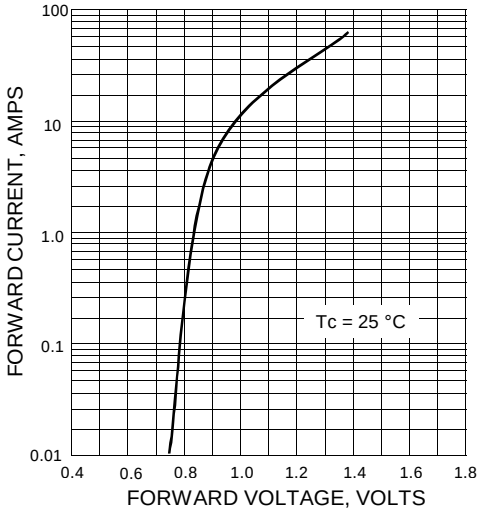


FIG.4 - POWER DISSIPATION