

## D20XB20 - D20XB60

**PRV : 200 - 600 Volts**

**Io : 20 Amperes**

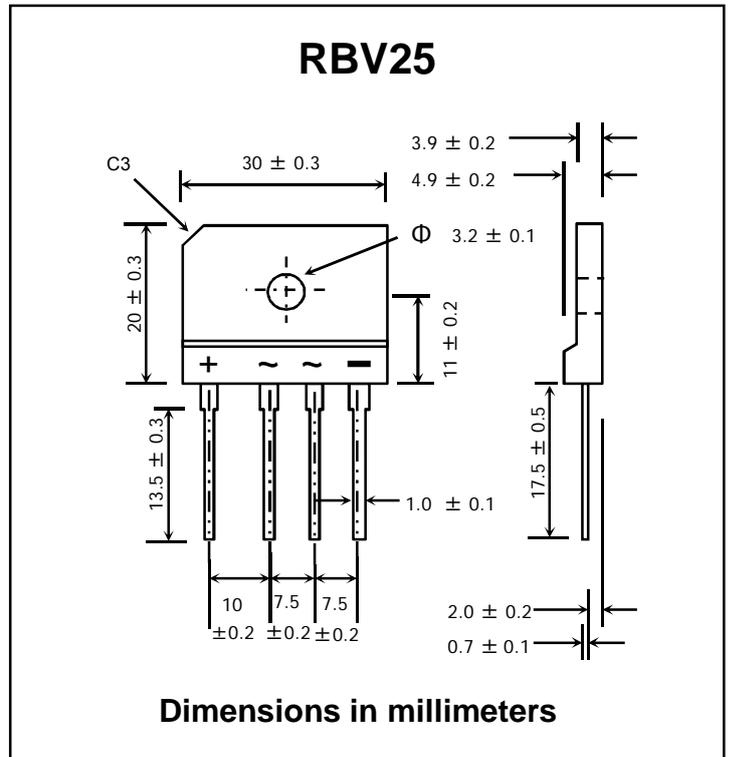
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* High case dielectric strength of 2000 V<sub>AC</sub> @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

## SILICON BRIDGE RECTIFIERS



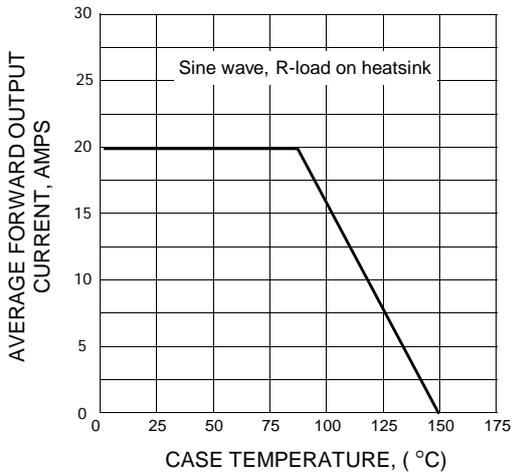
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

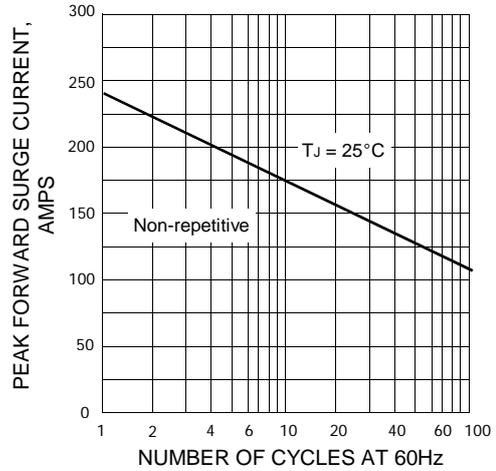
RATING	SYMBOL	D20XB20	D20XB60	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	200	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	600	V
Maximum Average Forward Current (50Hz Sine wave, R-load)	I <sub>o</sub>	20 (With heatsink, T <sub>c</sub> = 87°C) 3.5 (Without heatsink, T <sub>a</sub> = 25°C)		A
Maximum Peak Forward Surge Current, T <sub>j</sub> = 25°C (50Hz sine wave, Non-repetitive 1 cycle peak value)	I <sub>FSM</sub>	240		A
Current Squared Time at 1ms ≤ t < 10 ms, T <sub>c</sub> =25°C	I <sup>2</sup> t	200		A <sup>2</sup> S
Maximum Forward Voltage per Diode at I <sub>F</sub> = 10 A	V <sub>F</sub>	1.1		V
Maximum DC Reverse Current, V <sub>R</sub> =V <sub>RRM</sub> ( Pulse measurement, Rating of per diode)	I <sub>R</sub>	10		μA
Maximum Thermal Resistance, Junction to case	R <sub>θJC</sub>	1.5 (With heatsink)		°C/W
Maximum Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	22 (Without heatsink)		°C/W
Operating Junction Temperature	T <sub>J</sub>	150		°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150		°C

**RATING AND CHARACTERISTIC CURVES ( D20XB20 - D20XB60 )**

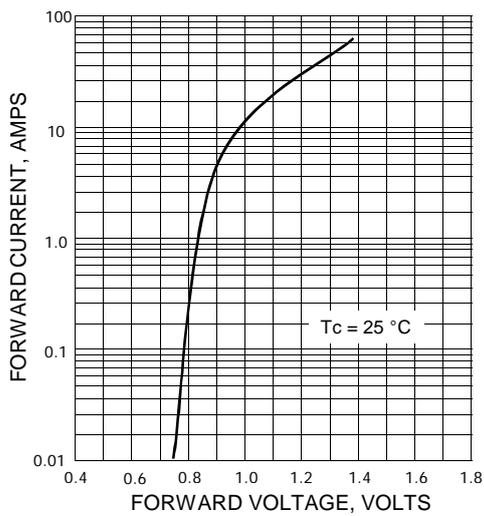
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



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



**FIG.4 - POWER DISSIPATION**

