

# D20SB10 Thru D20SB100

**High Current Glass Passivated Molding Single-Phase Bridge Rectifier**

**Reverse Voltage 100 to 1000V Forward Current 20 A**

## FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- High current capacity with small package
- Glass passivated chip junctions
- Superior thermal conductivity
- High IFSM



## 1. Maximum & Thermal Characteristics Ratings at 25 °C ambient temperature unless otherwise specified.

| Parameter Symbol  |                                       | Symbol           | D20SB10                                    | D20SB20 | D20SB40 | D20SB60 | D20SB80 | D20SB100 | Unit               |
|---|---------------------------------------|------------------|--|---------|---------|---------|---------|----------|--------------------|
| Maximum repetitive voltage  |                                       | VRRM             | 100  | 200     | 400     | 600     | 800     | 1000     | V                  |
| Maximum RMS Voltage   |                                       | VRMS             | 70   | 140     | 280     | 420     | 560     | 700      | V                  |
| Maximum DC Blocking Voltage   |                                       | VDC              | 100  | 200     | 400     | 600     | 800     | 1000     | V                  |
| Maximum DC reverse current TA=25  |                                       | IR               | 5  |         |         |         |         |          | μA                 |
| at rated DC blocking voltage TA=125   |                                       |                  | 500  |         |         |         |         |          |                    |
| Maximum average forward rectified output current at                               | With heatsink Tc=100 <sup>(1)</sup>   | Io               | 20   |         |         |         |         |          | A                  |
|   | Without heatsink Ta=25 <sup>(2)</sup> |                  | 3.5  |         |         |         |         |          | A                  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load |                                       | IFSM             | 300  |         |         |         |         |          | A                  |
| Rating of fusing (t<8.3ms)  |                                       | I <sup>2</sup> t | 270  |         |         |         |         |          | A <sup>2</sup> sec |
| Dielectric strength terminals to case , AC 1 minute Current 1mA                   |                                       | Vdia             | 2.5  |         |         |         |         |          | KV                 |
| Max instantaneous forward voltage at 10A  |                                       | VF               | 1.05                                       |         |         |         |         |          | V                  |
| Operating junction temperature  |                                       | TJ               | -55~150                                    |         |         |         |         |          |                    |
| Maximum thermal on P.C.B. without heat-sink                                       |                                       | RθJA             | 22   |         |         |         |         |          | /W                 |
| resistance per leg on Al plate heat-sink  |                                       | RθJC             | 1.5  |         |         |         |         |          |                    |
| Storage temperature   |                                       | Tstg             | -55~150                                    |         |         |         |         |          |                    |
| Mounting torque   |                                       | Tor              | Rating Torque : 0.8 ( Suggests 0.45~0.65 ) |         |         |         |         |          | N.m                |

Notes:

(1) Unit case mounted on aluminum plate heatsink

(2) Units mounted on P.C.B. without heatsink

# D20SB10 Thru D20SB100

## 2. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 Derating Curve

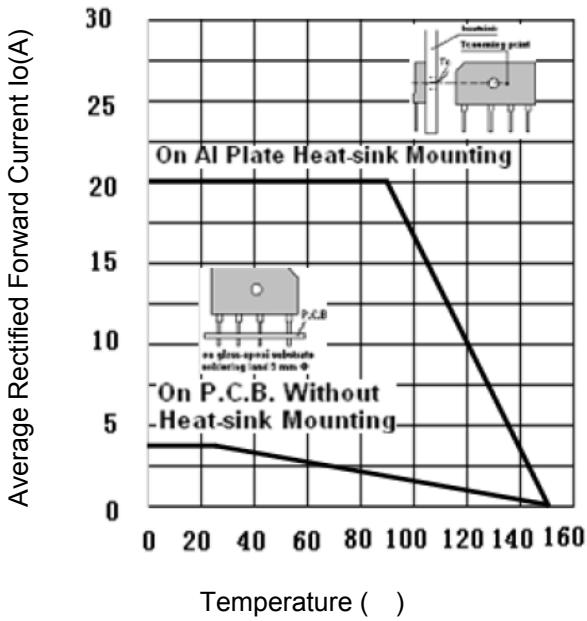


Fig.2 Typical Reverse Characteristics

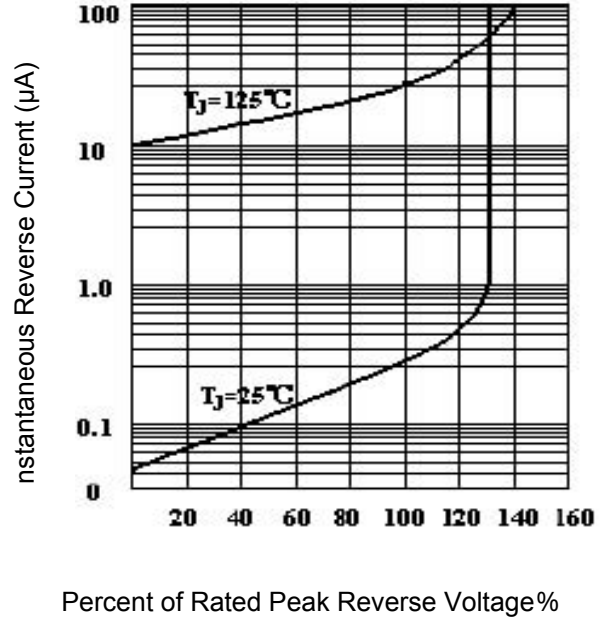


Fig.3 Forward Voltage

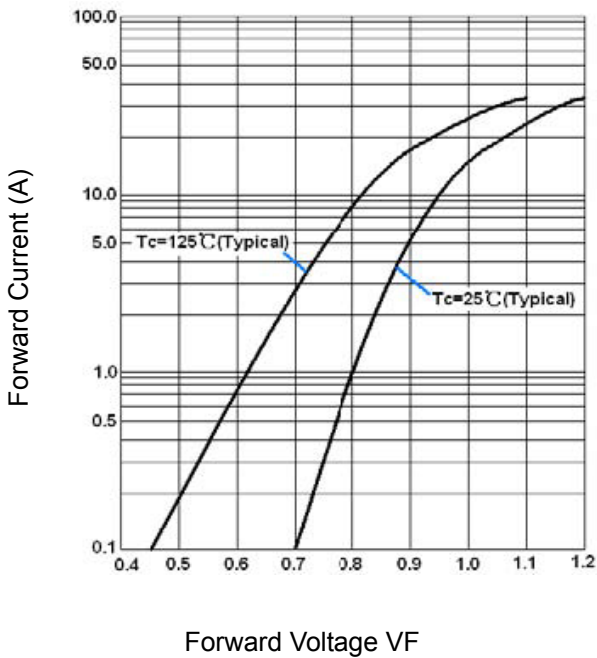
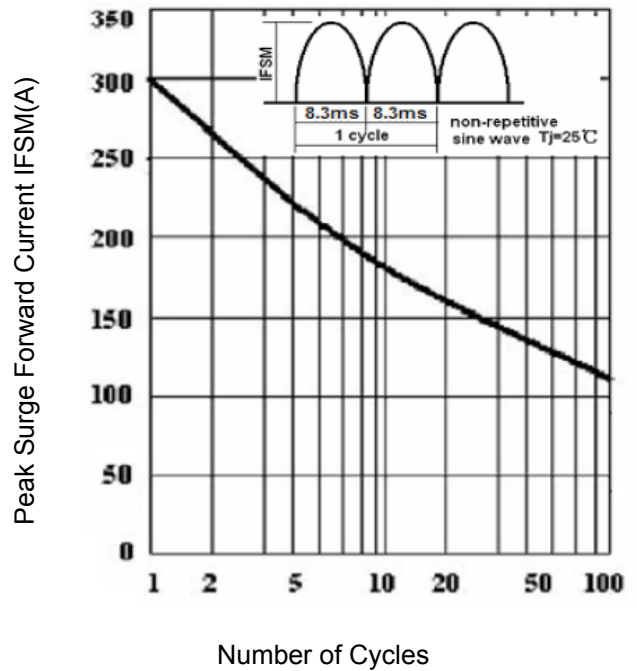
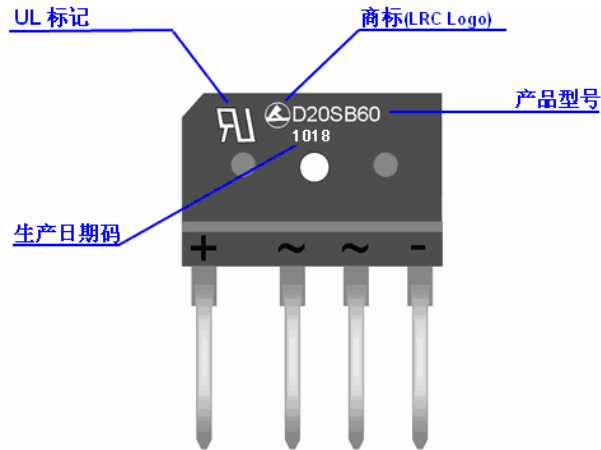


Fig.4 Peak Surge Forward Capability



# D20SB10 Thru D20SB100

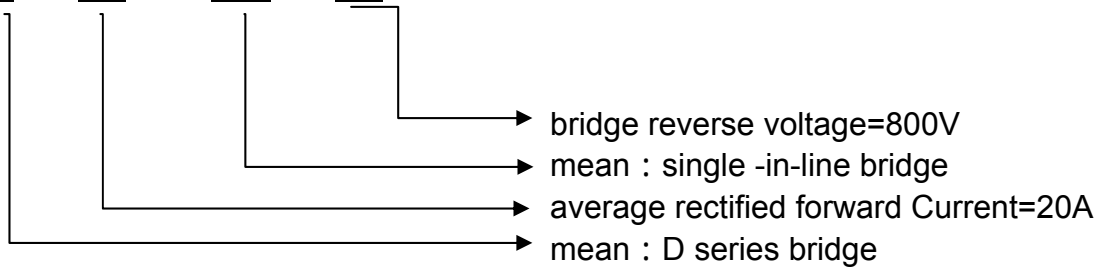
## 3. Marking Identification



**Note :**

生产日期码包含4位数字，例如“1010”，前两个数字“10”表示为2010年，另外二个数字“18”是指第18周，即表示该产品为2010年18周生产。

型号：D 20 SB 80



## 4. Dimension

