

## 1.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifier Reverse Voltage 50V to 1000V



### DBS

### Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 35 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

### Mechanical Data

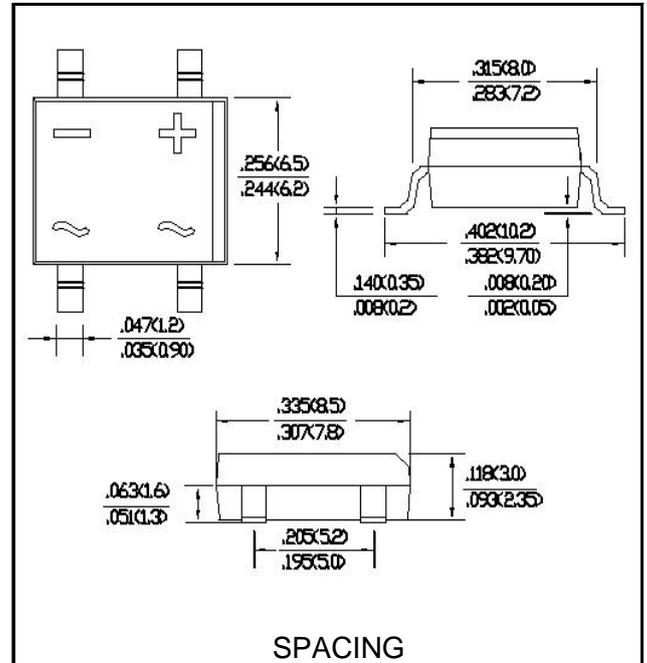
Case:Molded plastic

Terminals:Platde leads solderable per MIL-STD-750, Method 2026

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any

Weight:0.011ounce,0.32 grams(approx)



### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified,Resistive or inductive load,60HZ.

For Capacitive load derate current by 20%

| Parameter  | Symbol           | DBS10<br>1G | DBS10<br>2G | DBS10<br>3G | DBS10<br>4G | DBS10<br>5G | DBS10<br>6G | DBS107<br>G | unit               |
|--|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|
| Maximum repetitive peak reverse voltage  | VRRM             | 50          | 100         | 200         | 400         | 600         | 800         | 1000        | V                  |
| Maximum RMS bridge input voltage   | VRMS             | 35          | 70          | 140         | 280         | 420         | 560         | 700         | V                  |
| Maximum DC blocking voltage  | VDC              | 50          | 100         | 200         | 400         | 600         | 800         | 1000        | V                  |
| Maximum average forward rectified output current at TA=40°C                                  | IF(AV)           | 1.0         |             |             |             |             |             |             | A                  |
| Peak forward surge current 8.3ms single sine-wave super imposed on rated load (JEDEC Method) | IFSM             | 35          |             |             |             |             |             |             | A                  |
| Rating for fusing(t<8.3ms)   | I <sup>2</sup> t | 5           |             |             |             |             |             |             | A <sup>2</sup> sec |
| Typical Junction capacitance Per Element(Note 1)   | Cj               | 16          |             |             |             |             |             |             | p F                |
| Typical thermal resistance (Note 2)  | RθJA             | 63          |             |             |             |             |             |             | °C/w               |
| Operating j temperature range  | TJ               | -55to+150   |             |             |             |             |             |             | °C                 |
| Storage temperature range  | TSTG             | -55to+150   |             |             |             |             |             |             | °C                 |

### Electrical Characteristics

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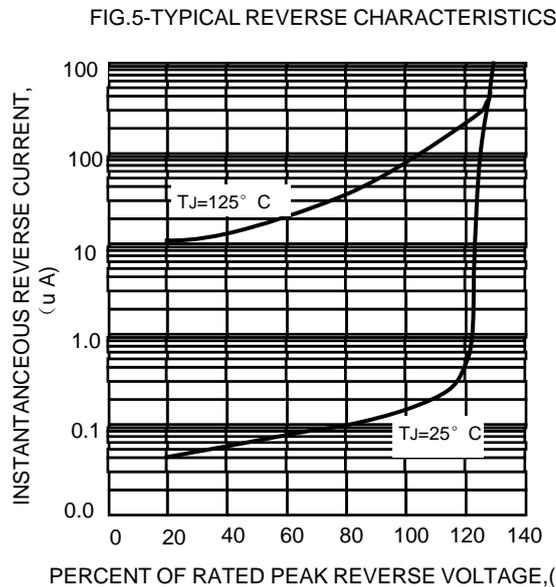
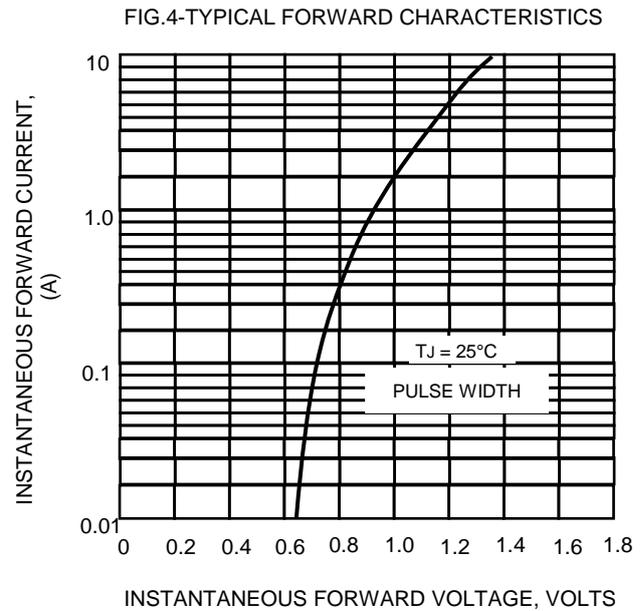
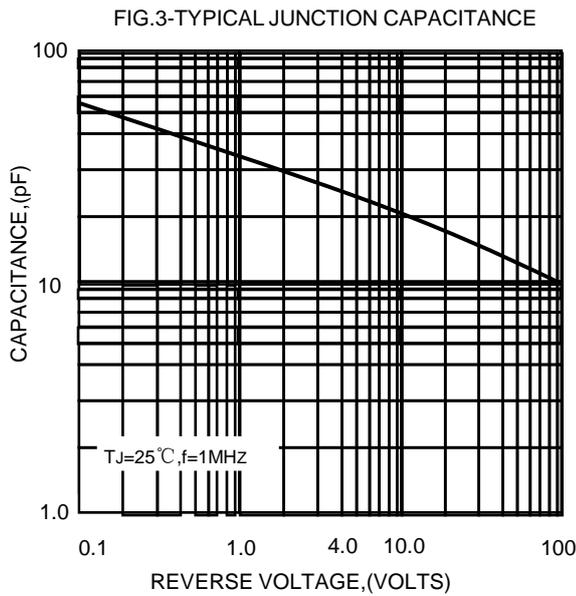
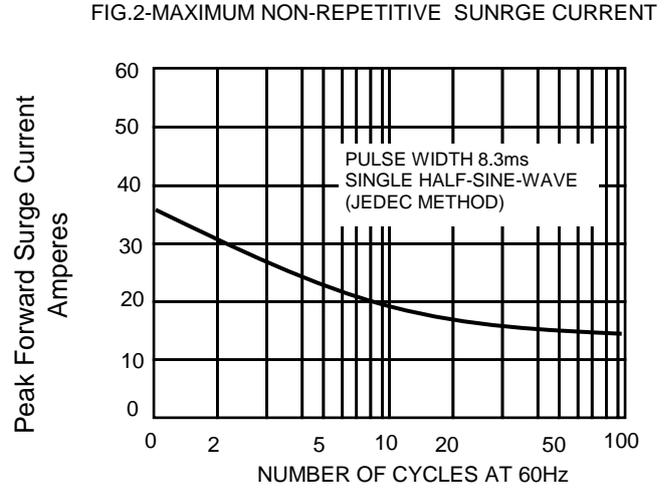
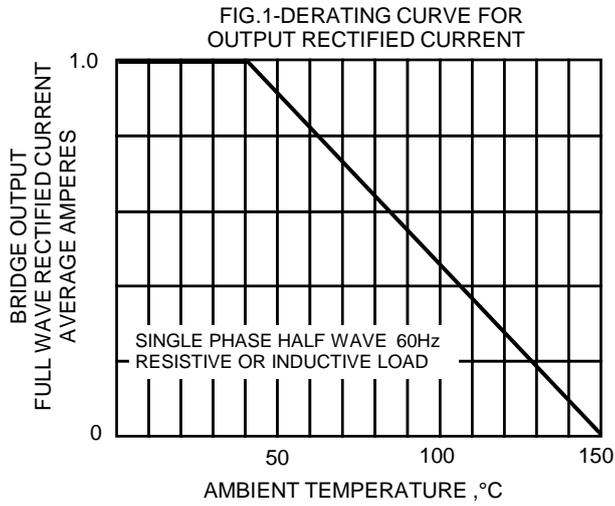
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|--|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| Maximum instantaneous forward voltage drop per leg at 1.0A | VF     | 1.1         |             |             |             |             |             |             | V    |
| Maximum DC reverse current at ratde TA=25°C                | IR     | 10          |             |             |             |             |             |             | μ A  |
| DC blocking voltage per element TA=125°C                   |        | 500         |             |             |             |             |             |             |      |

Notes: (1)Measured at 1.0MHz and applied reverse voltage of 4.0 V DC.

(2)Thermal resistance from junction to ambient mounted on P.C.B with 0.5\*0.5(13\*13mm)copper pads

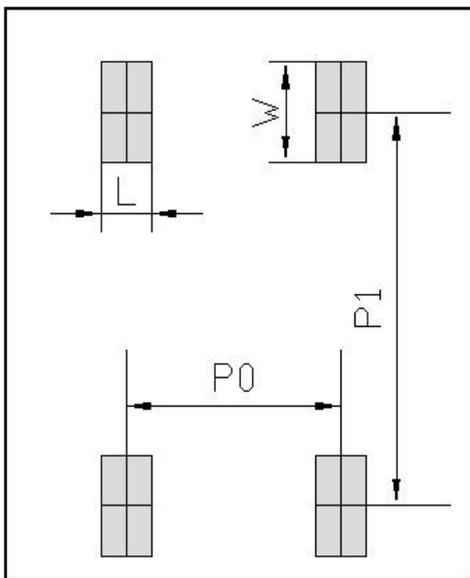
## Rating and Characteristic Curves (TA=25°C Unless otherwise noted)



## Ordering Information(Example)

| PREFFREN P/N    | UNIT WEIGHT(g)   | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|-----------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| DBS101G~DBS107G | Approximate 0.30 | 50                   | 5000                    | 20000                      | TUBE          |
| DBS101G~DBS107G | Approximate 0.30 | 1500                 | 3000                    | 21000                      | REEL          |

## Suggested pad layout



Dimensions in millimeters

| Unit:mm |      |
|---------|------|
| DIM     | MIN  |
| P0      | 5.12 |
| P1      | 8.73 |
| L       | 1.2  |
| W       | 2.22 |