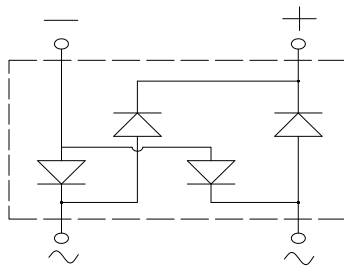
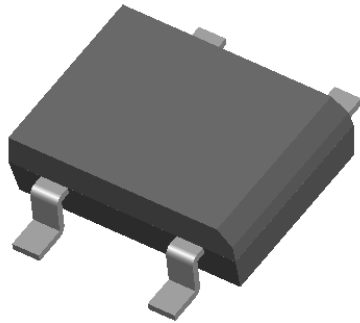


## Bridge Rectifiers



### Features

- UL recognition, file #E313149
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

### Mechanical Data

- **Package:** DBS  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

### ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                                                                                | SYMBOL           | UNIT             | DB151S    | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S |
|------------------------------------------------------------------------------------------|------------------|------------------|-----------|--------|--------|--------|--------|--------|--------|
| Device marking code                                                                      |                  |                  | DB151S    | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S |
| Repetitive peak reverse voltage                                                          | V <sub>RRM</sub> | V                | 50        | 100    | 200    | 400    | 600    | 800    | 1000   |
| Average rectified output current @60Hz sine wave, R-load, T <sub>a</sub> =40°C           | I <sub>O</sub>   | A                | 1.5       |        |        |        |        |        |        |
| On glass-epoxy substrate                                                                 |                  |                  |           |        |        |        |        |        |        |
| Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>j</sub> =25°C | I <sub>FSM</sub> | A                | 50        |        |        |        |        |        |        |
| Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode              | I <sup>2</sup> t | A <sup>2</sup> s | 10        |        |        |        |        |        |        |
| Storage temperature                                                                      | T <sub>stg</sub> | °C               | -55 ~+150 |        |        |        |        |        |        |
| Junction temperature                                                                     | T <sub>j</sub>   | °C               | -55 ~+150 |        |        |        |        |        |        |

### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                                                         | SYMBOL           | UNIT | TEST CONDITIONS                   | DB151S | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S |
|-------------------------------------------------------------------|------------------|------|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Maximum instantaneous forward voltage drop per diode              | V <sub>F</sub>   | V    | I <sub>F</sub> M=0.7A             | 1.05   |        |        |        |        |        |        |
| Maximum DC reverse current at rated DC blocking voltage per diode | I <sub>RRM</sub> | μA   | V <sub>RM</sub> =V <sub>RRM</sub> | 5      |        |        |        |        |        |        |



## DB151S THRU DB157S

### ■ Thermal Characteristics ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

| PARAMETER          |                                                        | SYMBOL           | UNIT                 | DB151S | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S |
|--------------------|--------------------------------------------------------|------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|
| Thermal Resistance | Between junction and ambient, On glass-epoxy substrate | $R_{\theta J-A}$ | $^{\circ}\text{C/W}$ | 68     |        |        |        |        |        |        |
|                    | Between junction and lead                              | $R_{\theta J-L}$ |                      | 15     |        |        |        |        |        |        |

### ■ Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g)   | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|------------------|-----------------------|-------------------------|----------------------------|---------------|
| DB151S~DB157S | B1           | Approximate 0.34 | 50                    | 5000                    | 20000                      | TUBE          |
| DB151S~DB157S | F1           | Approximate 0.34 | 1500                  | 3000                    | 21000                      | REEL          |

### ■ Characteristics(Typical)

FIG1:  $I_o$ - $T_a$  Curve

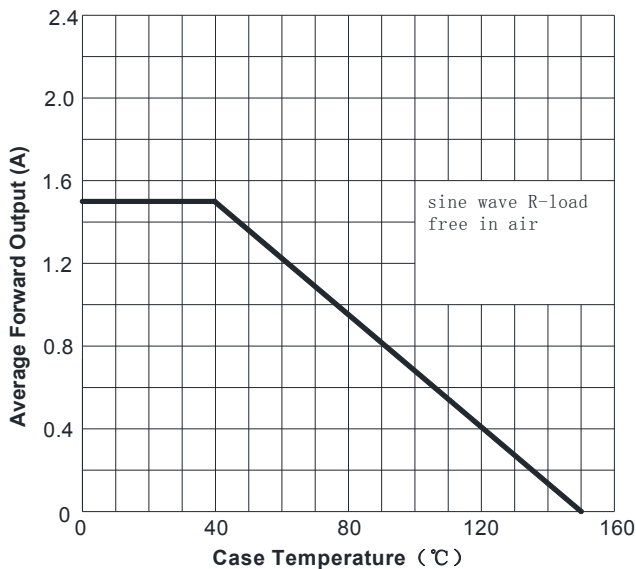


图2: 耐正向浪涌电流曲线  
FIG2: Surge Forward Current Capability

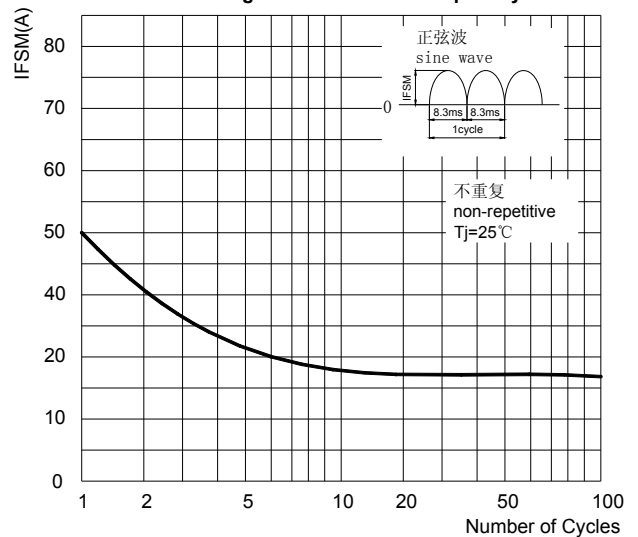


FIG3: Forward Voltage

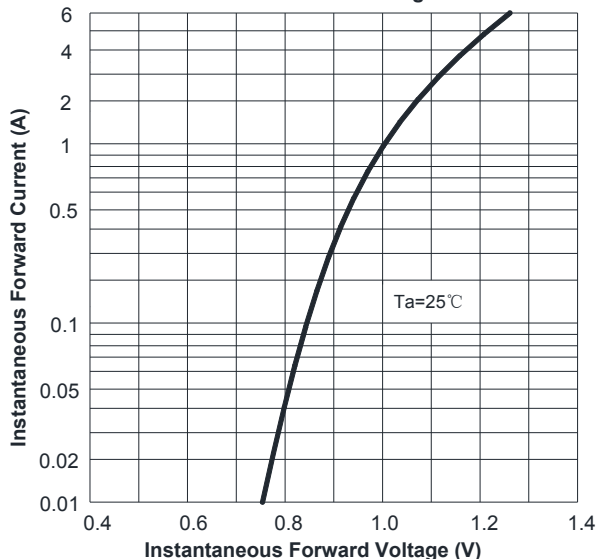
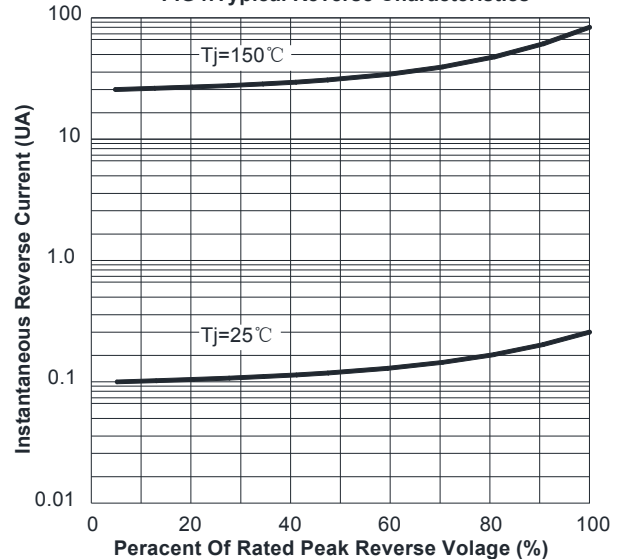


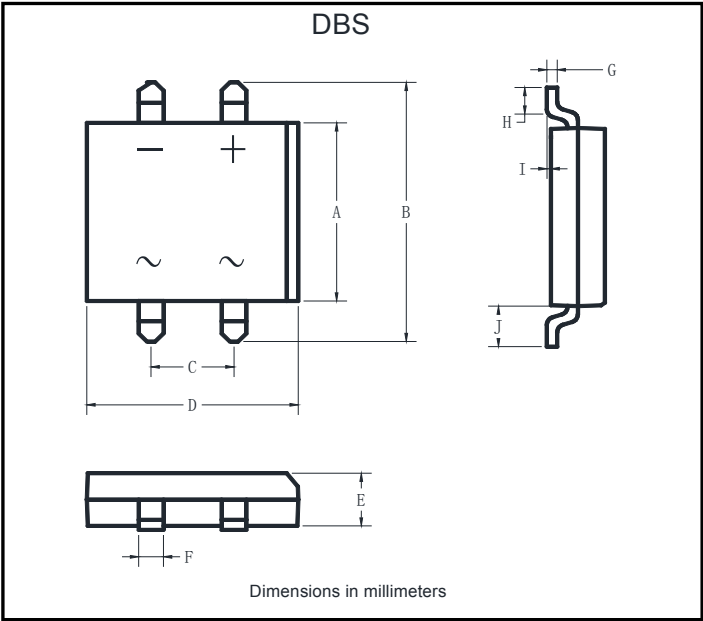
FIG4: Typical Reverse Characteristics





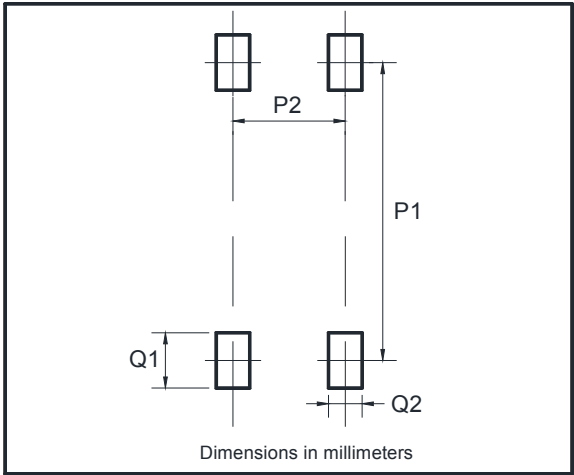
## DB151S THRU DB157S

### ■ Outline Dimensions



| DBS |       |       |
|-----|-------|-------|
| Dim | Min   | Max   |
| A   | 6.20  | 6.50  |
| B   | 9.60  | 10.30 |
| C   | 5.00  | 5.20  |
| D   | 8.13  | 8.51  |
| E   | 2.80  | 3.30  |
| F   | 1.02  | 1.2   |
| G   | 0.22  | 0.33  |
| H   | 1.02  | 1.53  |
| I   | 0.076 | 0.33  |
| J   | 1.80  | 2.10  |

### ■ Suggested pad layout



| Dim | Min  |
|-----|------|
| P1  | 8.73 |
| P2  | 5.12 |
| Q1  | 2.22 |
| Q2  | 1.2  |



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