

## ■ Features

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

## ■ Applications

- General purpose use in AC/DC bridge full wave rectification

## ■ Mechanical Data

- Case: DBS
- Polarity symbols being marked on body
- Molding compound meets UL 94V-0 flammability rating
- RoHS-compliant, Solder plated, solderable per MIL-STD-750, Method 2026



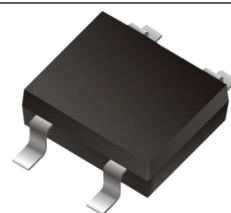
### Reverse Voltage

50-1000 V

### Forward Current

2.0 A max

### Appearance Image



## ■ Marking

- DB2xxS(01~07)

## ■ Maximum Ratings @ Ta = 25°C unless otherwise noted

| PARAMETER                                                                          | SYMBOL      | UNIT             | DB201S   | DB202S | DB203S | DB204S | DB205S | DB206S | DB207S |
|------------------------------------------------------------------------------------|-------------|------------------|----------|--------|--------|--------|--------|--------|--------|
| Repetitive peak reverse voltage                                                    | $V_{RRM}$   | V                | 50       | 100    | 200    | 400    | 600    | 800    | 1000   |
| Maximum RMS voltage                                                                | $V_{RMS}$   | V                | 35       | 70     | 140    | 280    | 420    | 560    | 700    |
| Maximum DC blocking Voltage                                                        | $V_{DC}$    | V                | 50       | 100    | 200    | 400    | 600    | 800    | 1000   |
| Maximum average output current@60Hz sine wave, resistance load                     | $I_{F(AV)}$ | A                | 2.0      |        |        |        |        |        |        |
| Peak forward surge current 8.3 ms single half sine wave superimposed on rated load | $I_{FSM}$   | A                | 60       |        |        |        |        |        |        |
| Peak forward surge current 1.0 ms single half sine wave superimposed on rated load |             | A                | 120      |        |        |        |        |        |        |
| Rating for fusing (t=8.3ms, Tj=25 °C)                                              | $I^2t$      | A <sup>2</sup> S | 14.94    |        |        |        |        |        |        |
| Storage temperature                                                                | $T_{stg}$   | °C               | -55~+150 |        |        |        |        |        |        |
| Junction temperature                                                               | $T_j$       | °C               | -55~+150 |        |        |        |        |        |        |

## ■ Electrical Characteristics @ Ta = 25°C unless otherwise noted

| PARAMETER                                               | TEST CONDITIONS         | SYMBOL | UNIT    | DB201S | DB202S | DB203S | DB204S | DB205S | DB206S | DB207S |
|---------------------------------------------------------|-------------------------|--------|---------|--------|--------|--------|--------|--------|--------|--------|
| Maximum instantaneous forward voltage                   | $I_F=1.0A$              | $V_F$  | V       | 1.0    |        |        |        |        |        |        |
| Maximum DC reverse current at rated DC blocking voltage | $V_R=V_{DC}$ , Tj=25°C  | $I_R$  | $\mu A$ | 5      |        |        |        |        |        |        |
|                                                         | $V_R=V_{DC}$ , Tj=100°C | $I_R$  |         | 100    |        |        |        |        |        |        |

■ Characteristic Curve (Typical)

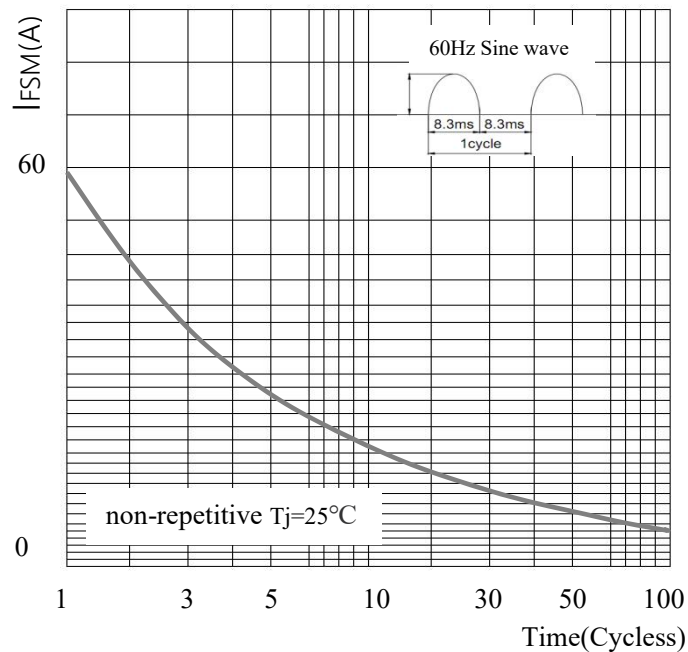
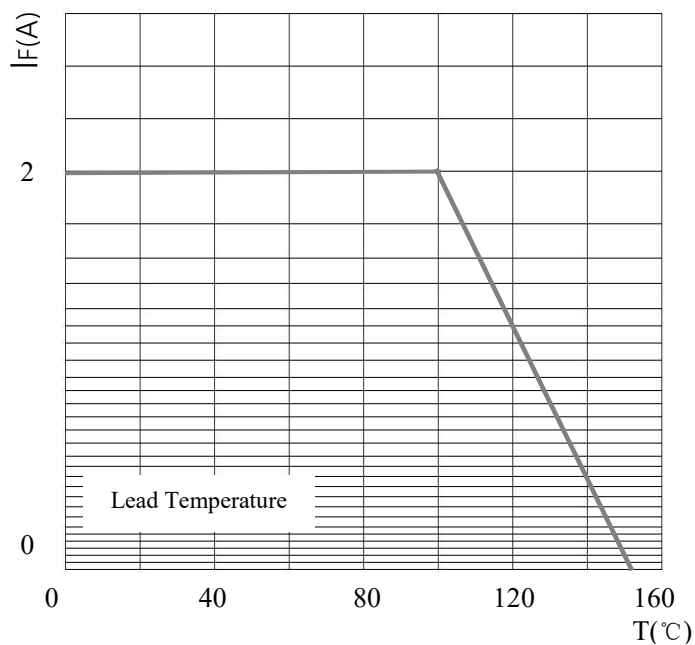


FIG1. Derating Curve For Output Rectified Current

FIG2. Surge Forward Current Capability

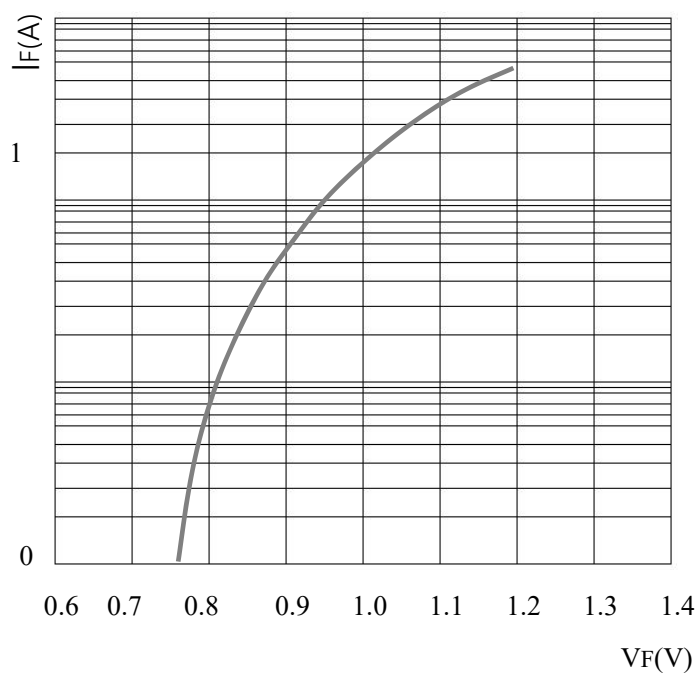


FIG3. Typical Forward Characteristics

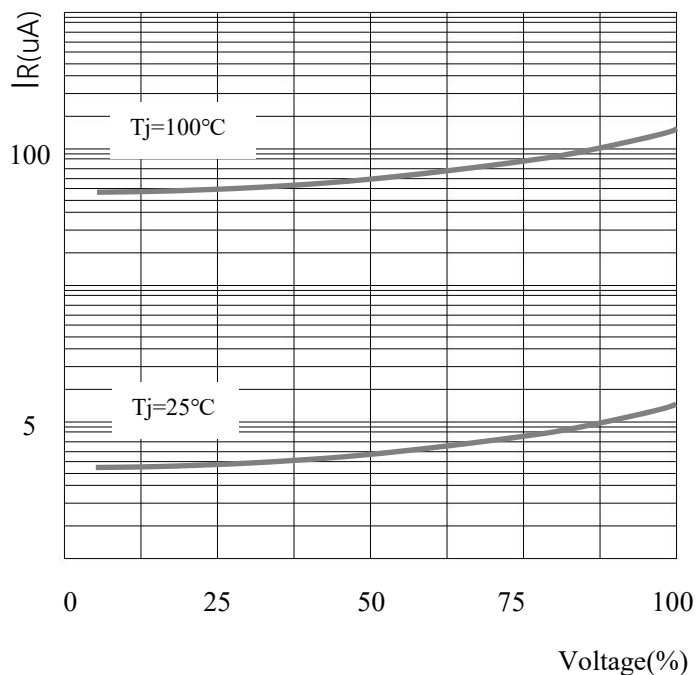
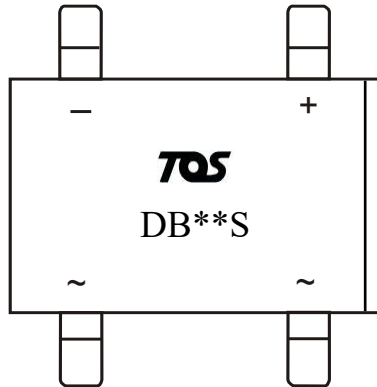


FIG4. Typical Reverse Characteristics

### ■ Marking and packet information



DB\*\*\*S: Product Type Code    **TOS** : Brand Loge

| Packaging information |          |
|-----------------------|----------|
| Reel                  | 1500PCS  |
| Carton                | 27000PCS |
| Reel Size             | 13"      |

### ■ DBS Package outline dimensions

| Symbol | Dimensions  |       |        |       |
|--------|-------------|-------|--------|-------|
|        | Millimeters |       | Inches |       |
|        | Min.        | Max.  | Min.   | Max.  |
| A      | 6.20        | 6.50  | 0.244  | 0.256 |
| B      | 8.13        | 8.51  | 0.320  | 0.335 |
| C      | 9.60        | 10.30 | 0.378  | 0.406 |
| D      | 5.00        | 5.20  | 0.197  | 0.205 |
| E      | 1.80        | 2.10  | 0.071  | 0.083 |
| F      | 0.08        | 0.33  | 0.003  | 0.013 |
| G      | 1.0         | 1.5   | 0.039  | 0.059 |
| H      | 0.18        | 0.22  | 0.007  | 0.009 |
| J      | 1.02        | 1.20  | 0.040  | 0.047 |
| K      | 2.80        | 3.30  | 0.110  | 0.130 |
| θ      | -           | 45°   | -      | 45°   |

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