

■ **Features**

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

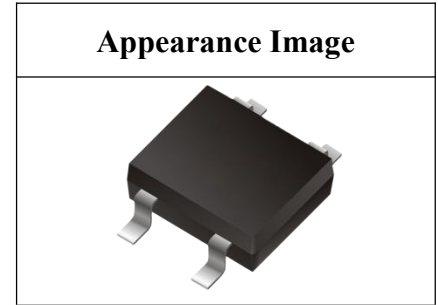
| |
|-------------------------------------|
| Reverse Voltage 50-1000 V |
| Forward Current 1.0 A max |

■ **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



■ **Marking**

- DB1xxS(01~07)

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

| PARAMETER | SYMBOL | UNIT | DB101S | DB102S | DB103S | DB104S | DB105S | DB106S | DB107S |
|--|--------------------|------------------|----------|--------|--------|--------|--------|--------|--------|
| 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 | 1.0 | | | | | | |
| Peak forward surge current 8.3 ms single half sine wave superimposed on rated load | I _{FSM} | A | 40 | | | | | | |
| Peak forward surge current 1.0 ms single half sine wave superimposed on rated load | | A | 80 | | | | | | |
| Current squared time @1ms≤t<8.3ms T _j =25°C, Rating of per diode | I ² t | A ² S | 6.64 | | | | | | |
| 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 | DB101S | DB102S | DB103S | DB104S | DB105S | DB106S | DB107S |
|---|---|----------------|------|--------|--------|--------|--------|--------|--------|--------|
| Maximum instantaneous forward voltage | I _F =0.5A | V _F | V | 1.0 | | | | | | |
| Maximum DC reverse current at rated DC blocking voltage | V _R =V _{DC} , T _j =25°C | I _R | μA | 5 | | | | | | |
| | V _R =V _{DC} , T _j =100°C | I _R | | 100 | | | | | | |

■ **Characteristic Curve (Typical)**

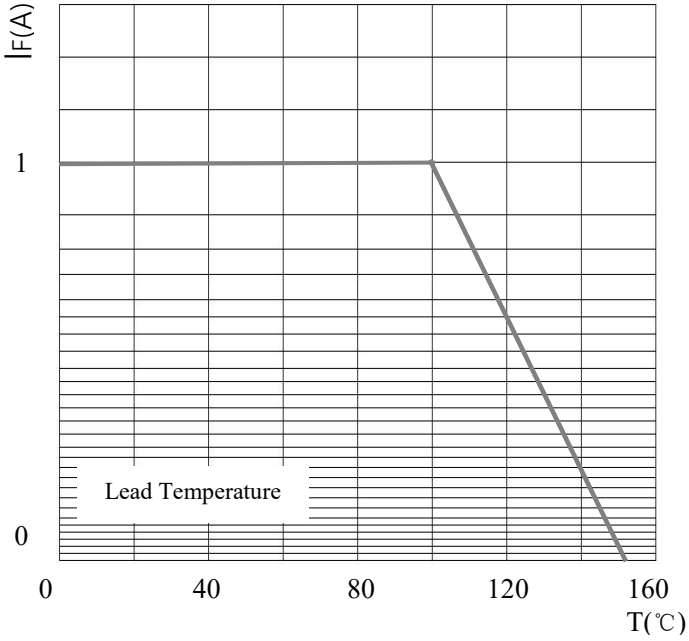


FIG1. Derating Curve For Output Rectified Current

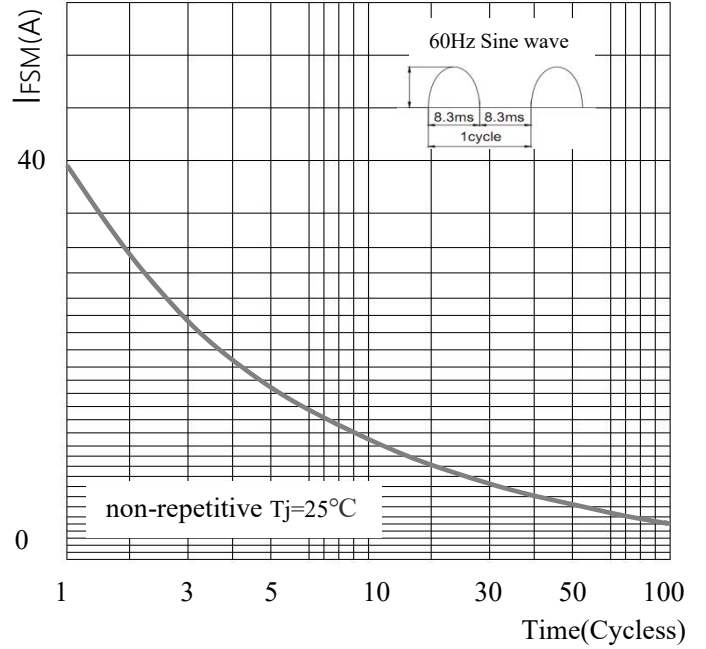


FIG2. Surge Forward Current Capability

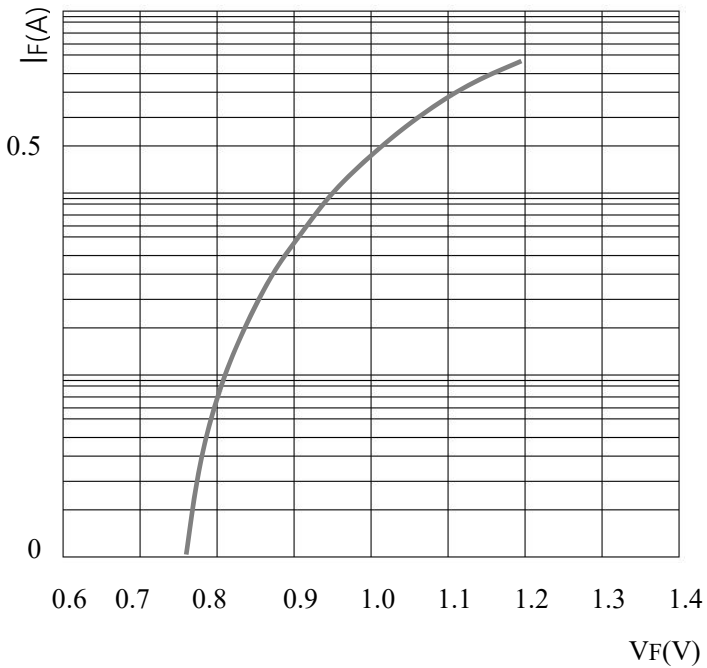


FIG3. Typical Forward Characteristics

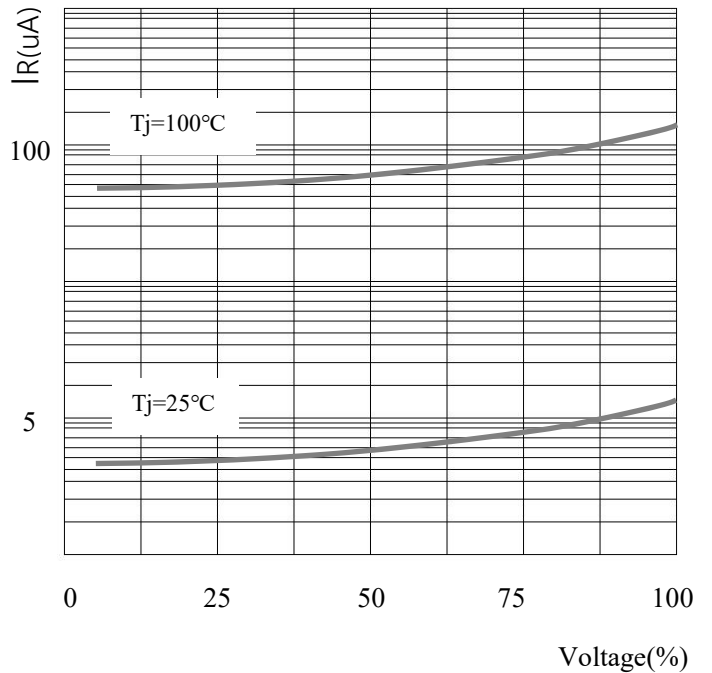
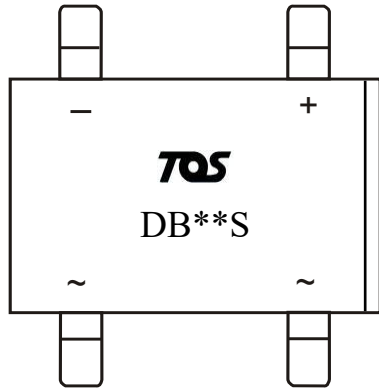


FIG4. Typical Reverse Characteristics

■ **Marking and packet information**



DB***S: Product Type Code **TOS**: Brand Logo

| 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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