

- High case dielectric strength of 2000VRMS
- Reliable low cost construction
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



**TS4B**

**MECHANICAL DATA**

**Case :** TS4B

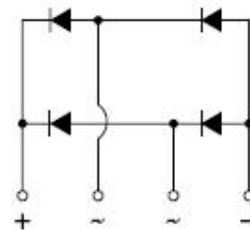
Molding compound, UL flammability classification rating 94V-0  
 Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant

**Terminal :** Matte tin plated leads, solderable per JESD22-B102  
 Meet JESD 201 class 1A whisker test

**Polarity :** Polarity as marked on the body

**Mounting torque :** 5 in-lbs maximum

**Weight :** 4 gram (approximately)



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)**

| PARAMETER   | SYMBOL             | TS4B<br>01G   | TS4B<br>02G | TS4B<br>03G | TS4B<br>04G | TS4B<br>05G | TS4B<br>06G |
|---|--------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Maximum repetitive peak reverse voltage   | V <sub>RRM</sub>   | 50            | 100         | 200         | 400         | 600         | 800         |
| Maximum RMS voltage   | V <sub>RMS</sub>   | 35            | 70          | 140         | 280         | 420         | 560         |
| Maximum DC blocking voltage   | V <sub>DC</sub>    | 50            | 100         | 200         | 400         | 600         | 800         |
| Maximum average forward rectified current   | I <sub>F(AV)</sub> | 4             |             |             |             |             |             |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I <sub>FSM</sub>   | 120           |             |             |             |             |             |
| Rating for fusing (t<8.3mS)   | I <sup>2</sup> T   | 60            |             |             |             |             |             |
| Maximum instantaneous forward voltage (Note 1)<br>@ 2 A<br>@ 4 A                    | V <sub>F</sub>     |               |             |             |             | 1.0<br>1.1  |             |
| Maximum DC reverse current<br>at rated DC blocking voltage                          | I <sub>R</sub>     |               |             |             |             | 5<br>500    |             |
| Typical thermal resistance  | R <sub>θJC</sub>   | 5.5           |             |             |             |             |             |
| Operating junction temperature range  | T <sub>J</sub>     | - 55 to + 150 |             |             |             |             |             |
| Storage temperature range   | T <sub>STG</sub>   | - 55 to + 150 |             |             |             |             |             |

Note 1 : Pulse test with PW=300u sec, 1% duty cycle

|          |    |      |           |
|----------|----|------|-----------|
| (Note 1) | D2 | TS4B | 20 / TUBE |
|          | X2 | TS4B | Forming   |

Note 1: "x" defines voltage from 50V (TS4B01G) to 1000V (TS4B07G)

EXAMPLE

| PREFERRED P/N | PART NO. | PACKING CODE | GREEN COMPOUND CODE | DESCRIPTION    |
|---------------|----------|--------------|---------------------|----------------|
| TS4B01G C2    | TS4B01G  | C2           |                     |                |
| TS4B01G C2G   | TS4B01G  | C2           | G                   | Green compound |

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

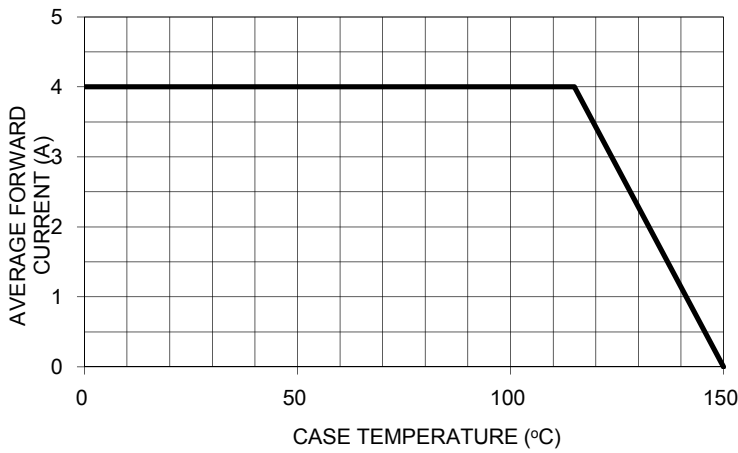


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

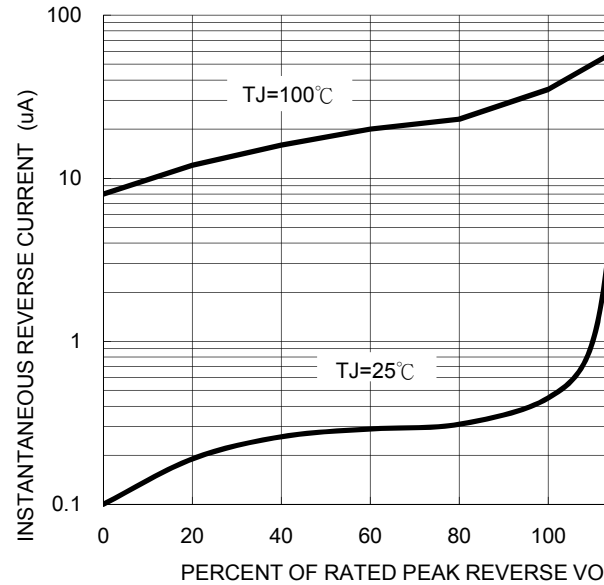


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

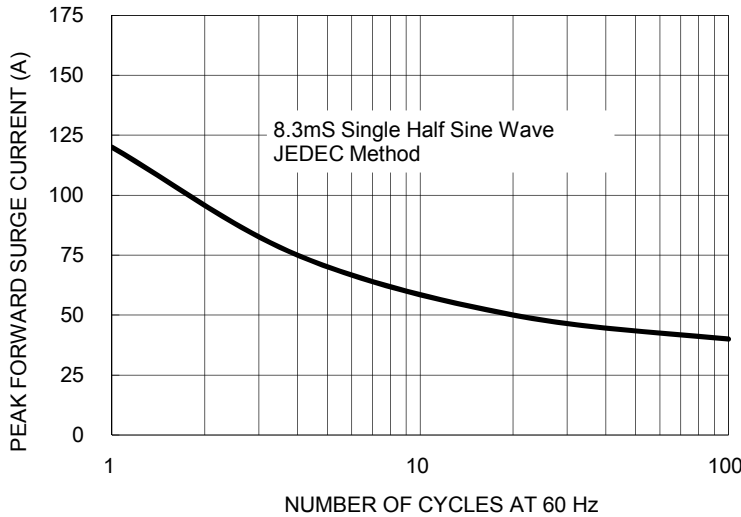
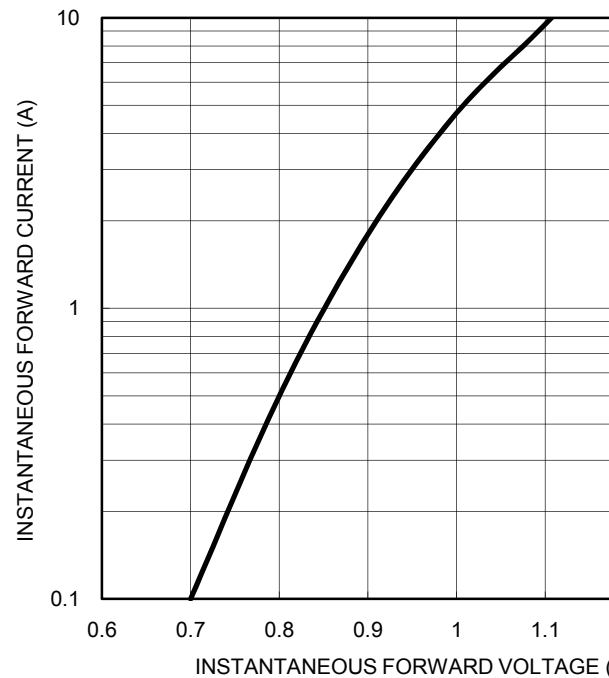
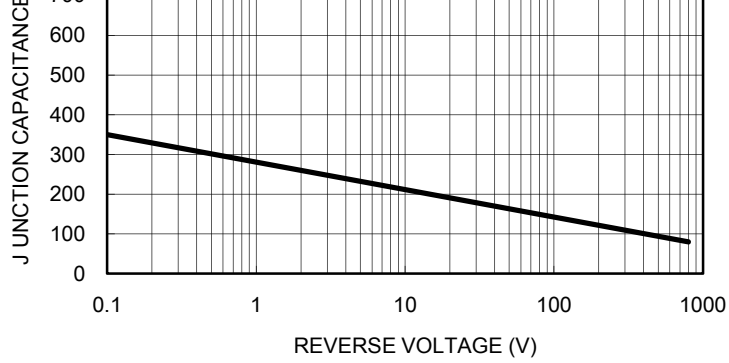
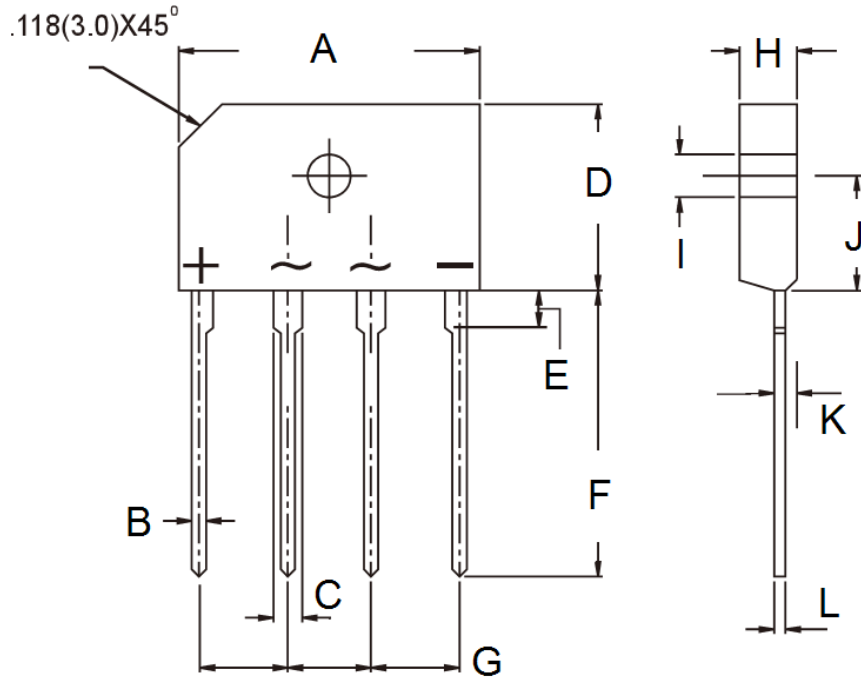


FIG. 4- TYPICAL FORWARD CHARACTERISTICS



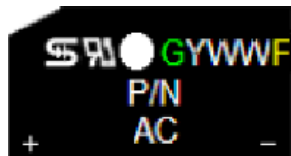


PACKAGE OUTLINE DIMENSIONS



| DIM. | Unit(mm) |       | Unit(i) |
|------|----------|-------|---------|
|      | Min      | Max   | Min     |
| A    | 24.70    | 25.30 | 0.972   |
| B    | 0.90     | 1.10  | 0.035   |
| C    | 1.80     | 2.20  | 0.071   |
| D    | 14.70    | 15.30 | 0.579   |
| E    | 3.96     | 4.37  | 0.156   |
| F    | 17.00    | 18.00 | 0.669   |
| G    | 7.30     | 7.70  | 0.287   |
| H    | 3.30     | 3.70  | 0.130   |
| I    | 3.10     | 3.40  | 0.122   |
| J    | 9.30     | 9.70  | 0.366   |
| K    | 1.52     | 1.73  | 0.060   |
| L    | 0.55     | 0.75  | 0.022   |

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code