

4A, 50V - 1000V Glass Passivated Bridge Rectifiers

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength of $2000V_{\text{RMS}}$
- Reliable low cost construction
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21









MECHANICAL DATA

Case: TS4B

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test **Polarity:** Polarity as marked on the body **Mounting torque:** 5 in-lbs maximum

Weight: 4 g (approximately)

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted) | | | | | | | | | |
|--|------------------|--------------|------|------|------|------|--------|------|------|
| PARAMETER | SYMBOL | TS4B TS4 | TS4B | TS4B | TS4B | TS4B | TS4B | TS4B | UNIT |
| PARAIVIE I ER | | 01G | 02G | 03G | 04G | 05G | 06G | 07G | UNIT |
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current | F(AV) | 4 | | | | | Α | | |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 120 | | | | | А | | |
| Rating for fusing (t<8.3ms) | l ² t | 60 | | | | | A^2s | | |
| Maximum instantaneous forward voltage (Note 1) @ 2 A @ 4 A | V _F | 1.0 1.1 | | | | | V | | |
| Maximum reverse current @ rated V _R T _J =25°C T _J =125°C | I _R | 5 500 | | | | μA | | | |
| Typical thermal resistance | $R_{	heta JC}$ | | | | 5.5 | | | | °C/W |
| Operating junction temperature range | T _J | - 55 to +150 | | | °C | | | | |
| Storage temperature range | T _{STG} | - 55 to +150 | | | °C | | | | |

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

140



| ORDERING INFORMATION | | | | | | |
|----------------------|----------|---------|--------------|---------|-----------|--|
| PART NO. | PART NO. | PACKING | PACKING CODE | PACKAGE | PACKING | |
| | SUFFIX | CODE | SUFFIX (*) | | | |
| T0.4D00 | | C2 | | TS4B | 20 / Tube | |
| TS4B0xG (Note 1) | Н | X0 | G | TS4B | Forming | |
| (Note 1) | | D2 | | TS4B | 20 / Tube | |

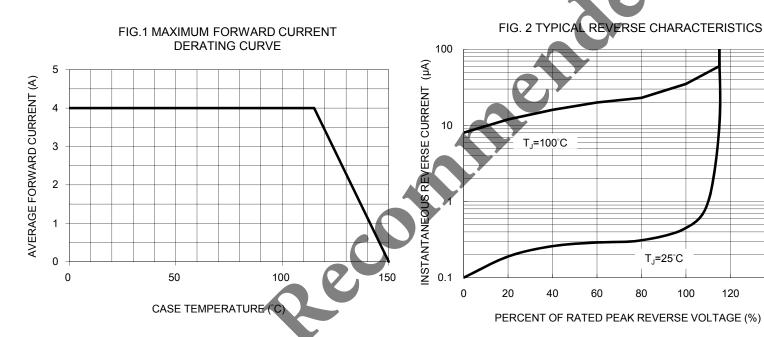
Note 1: "x" defines voltage from 50V (TS4B01G) to 1000V (TS4B07G)

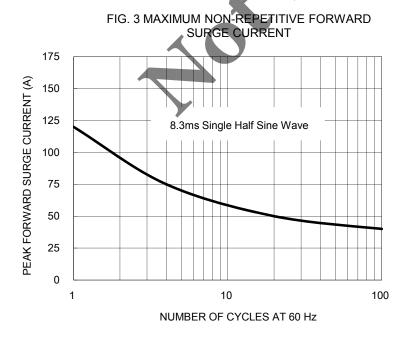
^{*:} Optional available

| EXAMPLE | | | | | | |
|---------------|-----------------------|---|--------------|------------------------|--------------------------------------|--|
| PREFERRED P/N | /N PART NO. PACKING O | | PACKING CODE | PACKING CODE SUFFIX | DESCRIPTION | |
| TS4B01GHC2G | TS4B01G | Н | C2 | G | AEC-Q101 qualified Green compound | |

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)





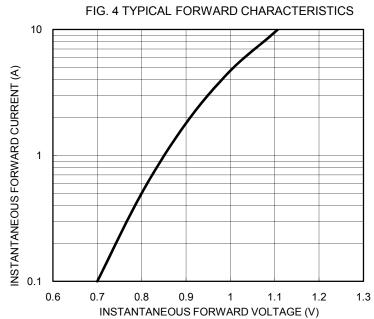
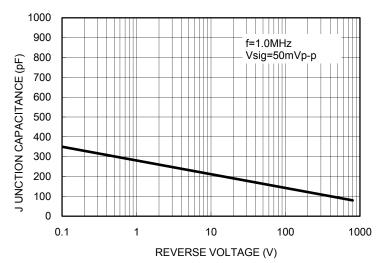
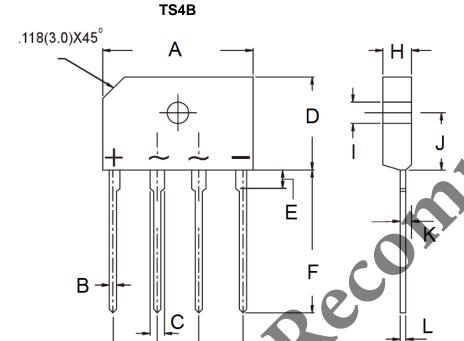




FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS



| DIM. | Unit | (mm) | Unit (inch) | | |
|--------|---------|-------|-------------|-------|--|
| DIIVI. | Min Max | | Min | Max | |
| Α | 24.70 | 25.30 | 0.972 | 0.996 | |
| В | 0.90 | 1.10 | 0.035 | 0.043 | |
| C | 1.80 | 2.20 | 0.071 | 0.087 | |
| P | 14.70 | 15.30 | 0.579 | 0.602 | |
| E | 3.96 | 4.37 | 0.156 | 0.172 | |
| F | 17.00 | 18.00 | 0.669 | 0.709 | |
| G | 7.30 | 7.70 | 0.287 | 0.303 | |
| Н | 3.30 | 3.70 | 0.130 | 0.146 | |
| I | 3.10 | 3.40 | 0.122 | 0.134 | |
| J | 9.30 | 9.70 | 0.366 | 0.382 | |
| K | 1.52 | 1.73 | 0.060 | 0.068 | |
| Ĺ | 0.55 | 0.75 | 0.022 | 0.030 | |

MARKING DIAGRAM



Specific Device Code

G = Green Compound YWW = Date Code

= Factory Code





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