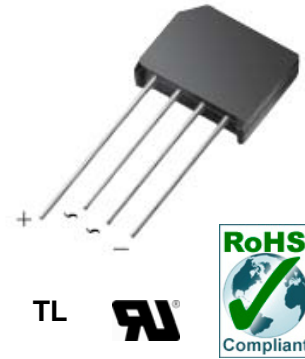


4A Bridge Rectifier

Features

- Ideal for printed circuit boards
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds
/.375"(9.5mm) lead length at 5lbs., (2.3kg) tension
- This series is UL recognized under component index, File number E194718
- RoHS Compliant



Mechanical Data

| | |
|-------------------|---|
| Case: | TL, molded plastic |
| Epoxy: | Plastic package has UL flammability 94V-0 |
| Terminals: | Plated leads solderable per MIL-STD-202, Method 208 |
| Polarity: | As marked on body |
| Weight: | 5.6 gram |

Maximum Ratings And Electrical Characteristics (T_{amb}=25°C)

| Symbol | Description | TL400 | TL401 | TL402 | TL404 | TL406 | TL408 | TL410 | Unit | Conditions |
|---------------|--------------------------------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|---|
| | | KBL005 | KBL01 | KBL02 | KBL04 | KBL06 | KBL08 | KBL10 | | |
| | Marking Code | TL400 KBL005 | TL401 KBL01 | TL402 KBL02 | TL404 KBL04 | TL406 KBL06 | TL408 KBL08 | TL410 KBL10 | | |
| VRRM | Max. Repetitive Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| VRMS | Max. RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| VDC | Max. DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| IF(AV) | Max. Average Forward Current | 4.0 | | | | | | | A | TA=50°C |
| IFSM | Peak Forward Surge Current | 200 | | | | | | | A | 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) |

4A Bridge Rectifier

TL400 - TL410/KBL005 - KBL10

| Symbol | Description | TL400 | TL401 | TL402 | TL404 | TL406 | TL408 | TL410 | Unit | Conditions |
|-----------------------------------|---|-------------|-------|-------|-------|-------|-------|-------|--------|-----------------------|
| | | KBL005 | KBL01 | KBL02 | KBL04 | KBL06 | KBL08 | KBL10 | | |
| V _F | Max. Instantaneous Forward Voltage drop per leg | 1.1 | | | | | | | V | I _F =4.0A |
| I _R | Maximum DC Reverse Current at Rated DC Blocking Voltage per leg | 5.0 | | | | | | | μA | T _A =25°C |
| | | 1.0 | | | | | | | mA | T _A =125°C |
| I _t | Rating for Fusing (t<8.3ms) | 166 | | | | | | | A²s | Note 1 |
| R _{thJA} | Typical Thermal Resistance per leg | 19 | | | | | | | °C / W | Note 2 |
| R _{thJL} | | 2.4 | | | | | | | | Note 3 |
| T _J , T _{STG} | Operating Junction and Storage Temperature Range | -50 to +150 | | | | | | | °C | |

Note: 1. Non-repetitive for t > 1ms and < 8.3ms.

2. Thermal resistance from junction to ambient with units mounted on 3.0 x 3.0 x 0.11" thick (75 x 75 x 3.0mm) Al. plate.

3. Thermal resistance from junction to lead with units mounted on P.C.B. at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads.

Typical Characteristics Curves

Fig.1-Max. Forward Current Derating Curve

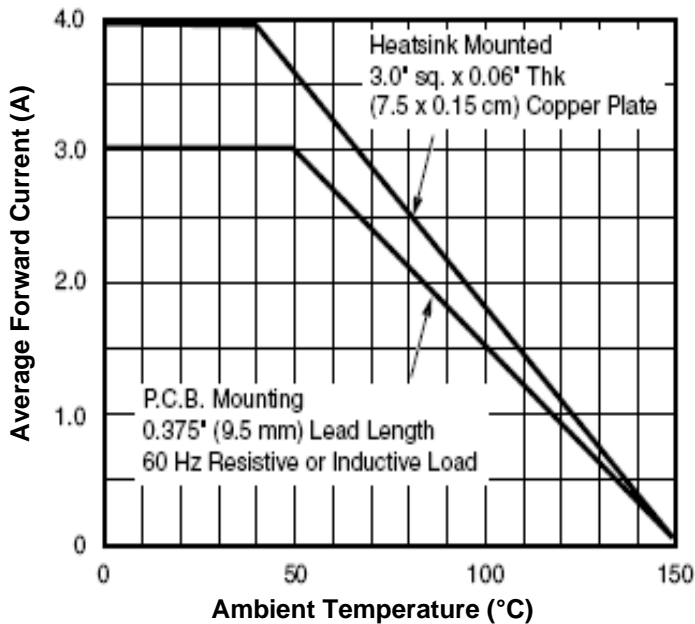


Fig.2-Max. Non-repetitive Peak Forward Surge Current per leg

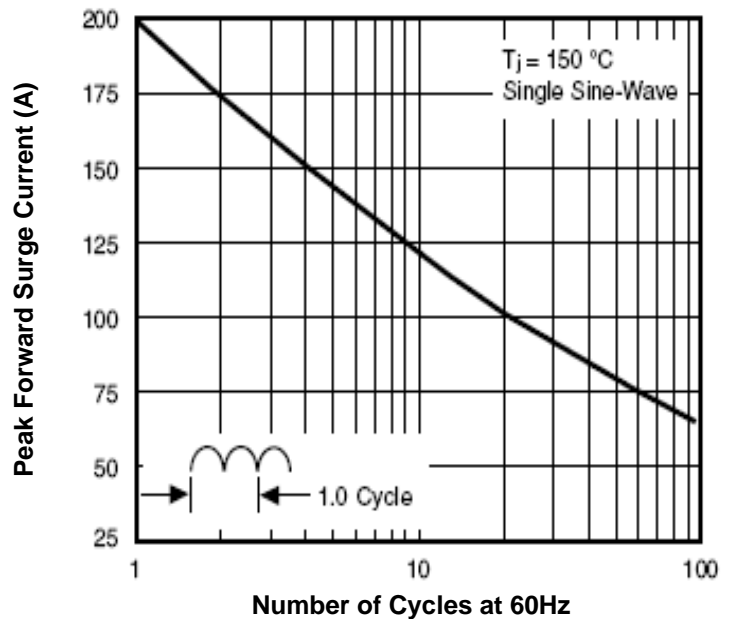


Fig.3-Typical Instantaneous Forward Characteristic per leg

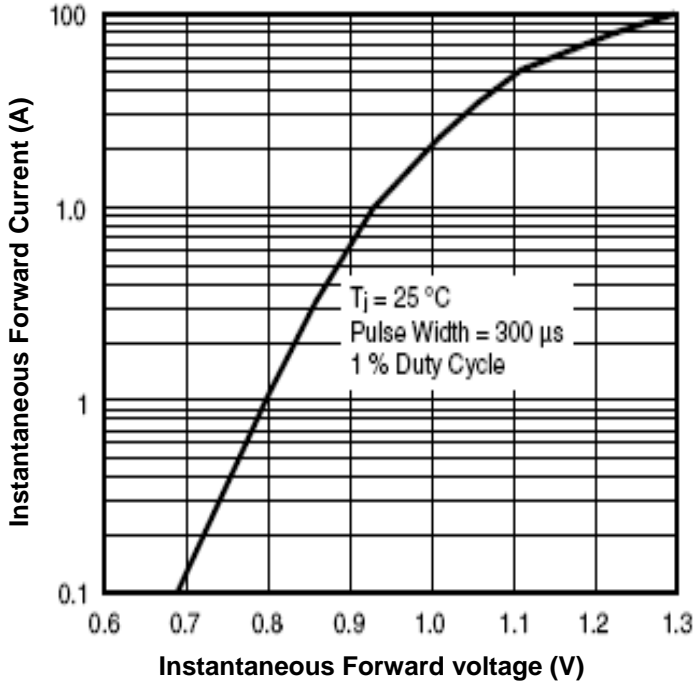


Fig.4-Typical Reverse Characteristics per leg

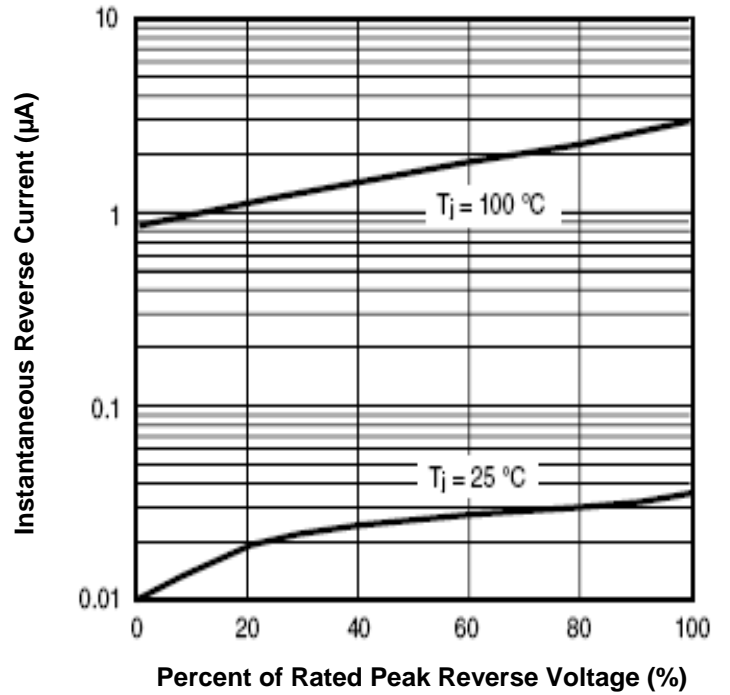
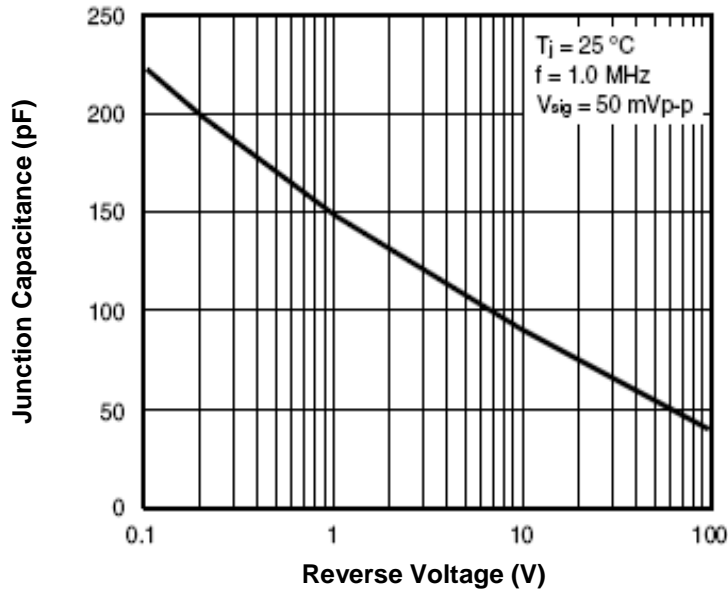
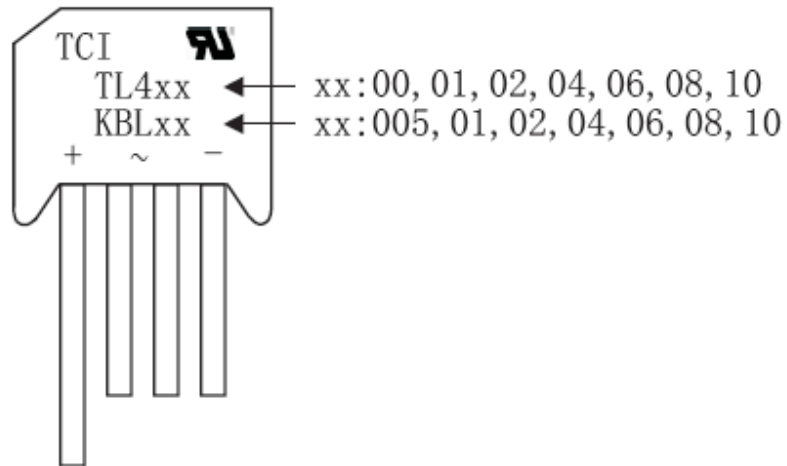


Fig.5- Typical Junction Capacitance per leg

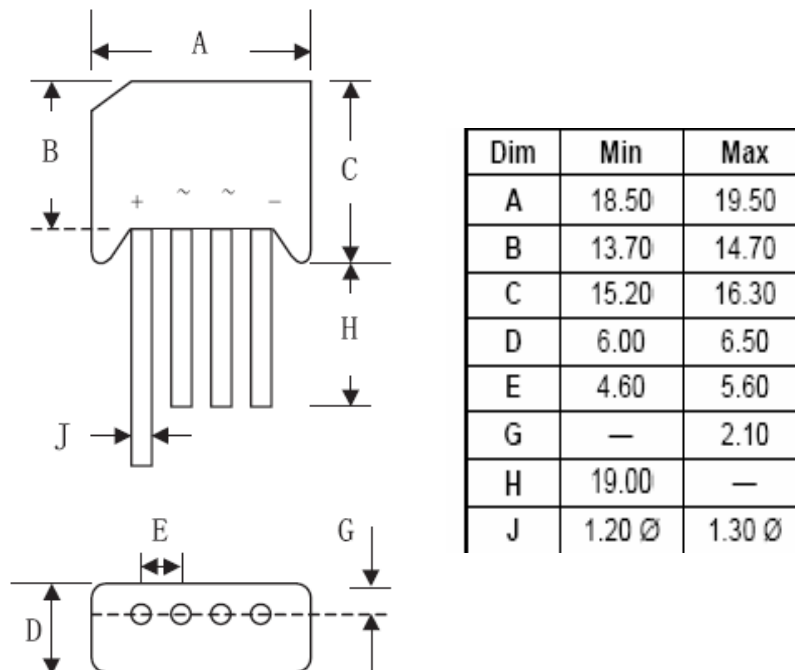


TL400 - TL410/KBL005 - KBL10

Marking Information:



Dimensions in mm



TL

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