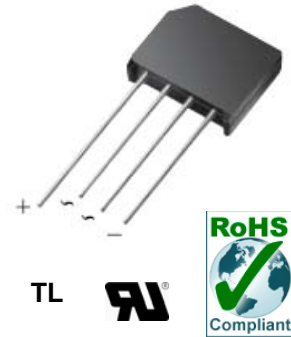


### 4A Bridge Rectifier

#### 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

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

#### Maximum Ratings And Electrical Characteristics (T<sub>amb</sub>=25°C)

Symbol	Description	TL400	TL401	TL402	TL404	TL406	TL408	TL410	Unit	Conditions
		KBL005	KBL01	KBL02	KBL04	KBL06	KBL08	KBL10		
	Marking Code	<b>TL400</b> <b>KBL005</b>	<b>TL401</b> <b>KBL01</b>	<b>TL402</b> <b>KBL02</b>	<b>TL404</b> <b>KBL04</b>	<b>TL406</b> <b>KBL06</b>	<b>TL408</b> <b>KBL08</b>	<b>TL410</b> <b>KBL10</b>		
<b>V<sub>RRM</sub></b>	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>V<sub>RMS</sub></b>	Max. RMS Voltage	35	70	140	280	420	560	700	V	
<b>V<sub>DC</sub></b>	Max. DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>I<sub>F(AV)</sub></b>	Max. Average Forward Current	4.0							A	TA=50°C
<b>I<sub>FSM</sub></b>	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 <sub>F</sub>	Max. Instantaneous Forward Voltage drop per leg	1.1							V	I <sub>F</sub> =4.0A
I <sub>R</sub>	Maximum DC Reverse Current at Rated DC Blocking Voltage per leg	5.0							μA	T <sub>A</sub> =25°C
		1.0							mA	T <sub>A</sub> =125°C
I <sub>t</sub>	Rating for Fusing (t<8.3ms)	166							A²s	Note 1
R <sub>thJA</sub>	Typical Thermal Resistance per leg	19							°C / W	Note 2
R <sub>thJL</sub>		2.4								Note 3
T <sub>J</sub> , T <sub>STG</sub>	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

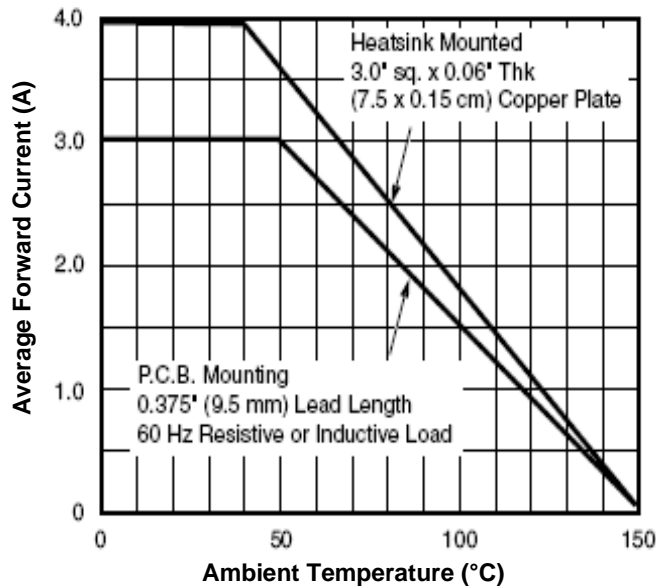
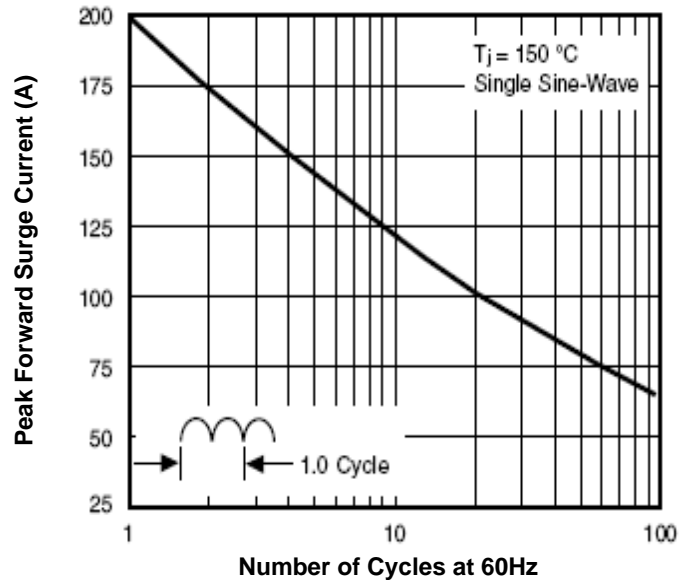


Fig.2-Max. Non-repetitive Peak Forward Surge Current per leg



# 4A Bridge Rectifier

TL400 - TL410/KBL005 - KBL10

Fig.3-Typical Instantaneous Forward Characteristic per leg

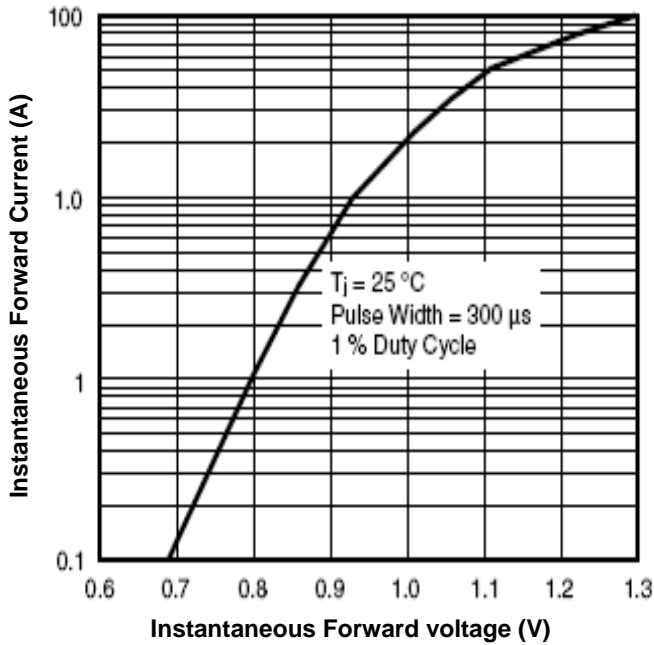


Fig.4-Typical Reverse Characteristics per leg

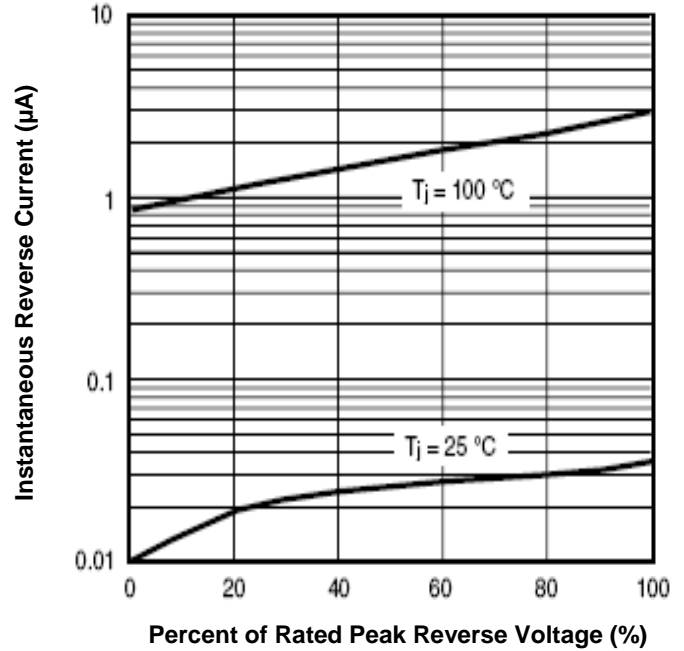
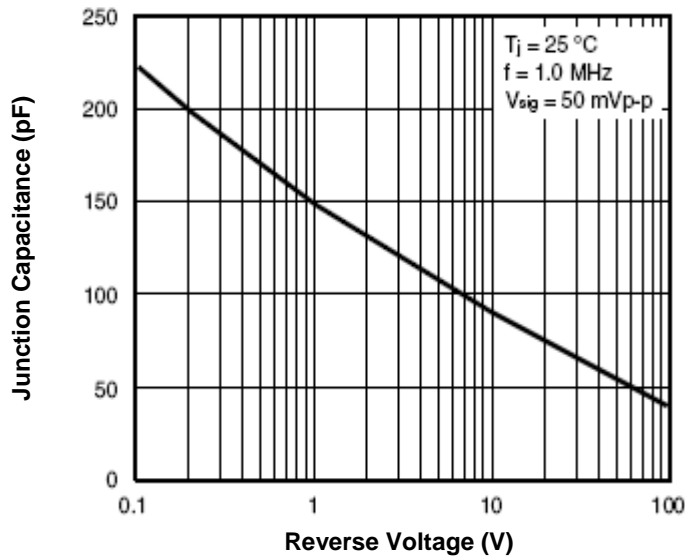


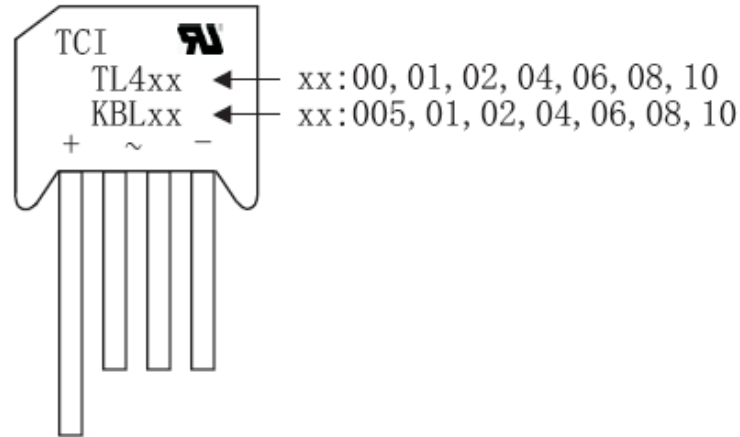
Fig.5- Typical Junction Capacitance per leg



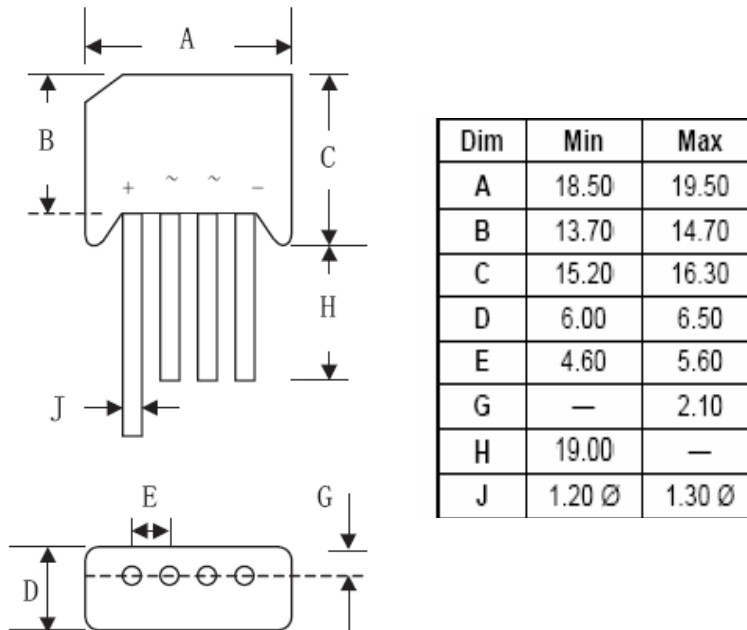
# 4A Bridge Rectifier

## TL400 - TL410/KBL005 - KBL10

### Marking Information:



### Dimensions in mm



TL

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