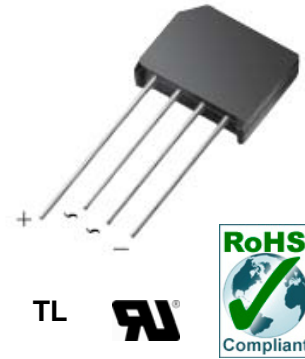


### 4A Bridge Rectifier

#### 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	TL400 KBL005	TL401 KBL01	TL402 KBL02	TL404 KBL04	TL406 KBL06	TL408 KBL08	TL410 KBL10		
<b>VRRM</b>	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>VRMS</b>	Max. RMS Voltage	35	70	140	280	420	560	700	V	
<b>VDC</b>	Max. DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>IF(AV)</b>	Max. Average Forward Current	4.0							A	TA=50°C
<b>IFSM</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

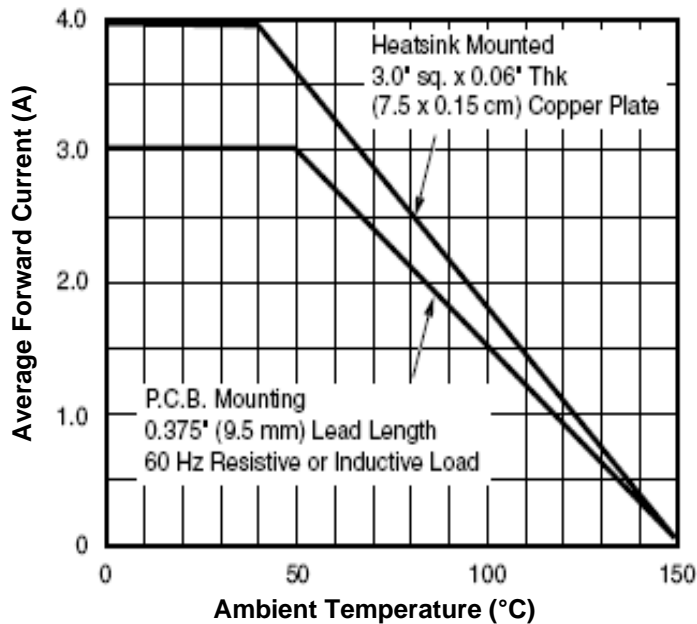


Fig.2-Max. Non-repetitive Peak Forward Surge Current per leg

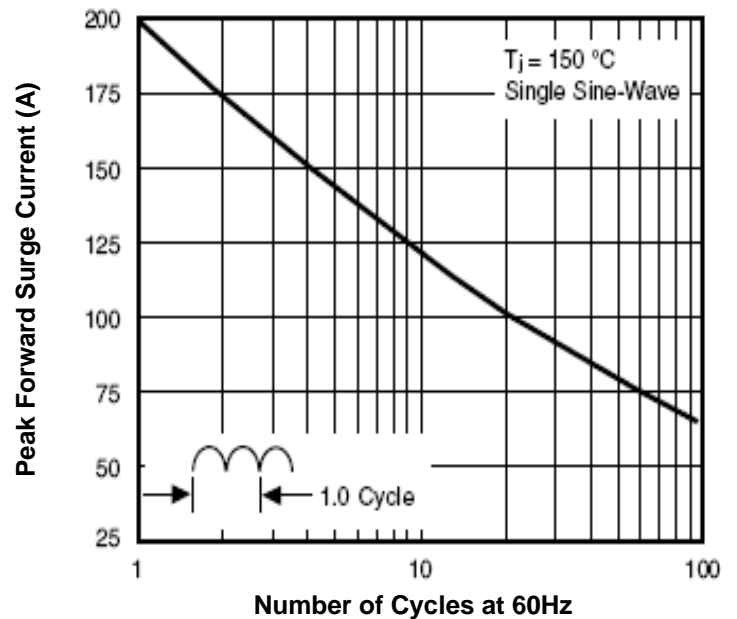


Fig.3-Typical Instantaneous Forward Characteristic per leg

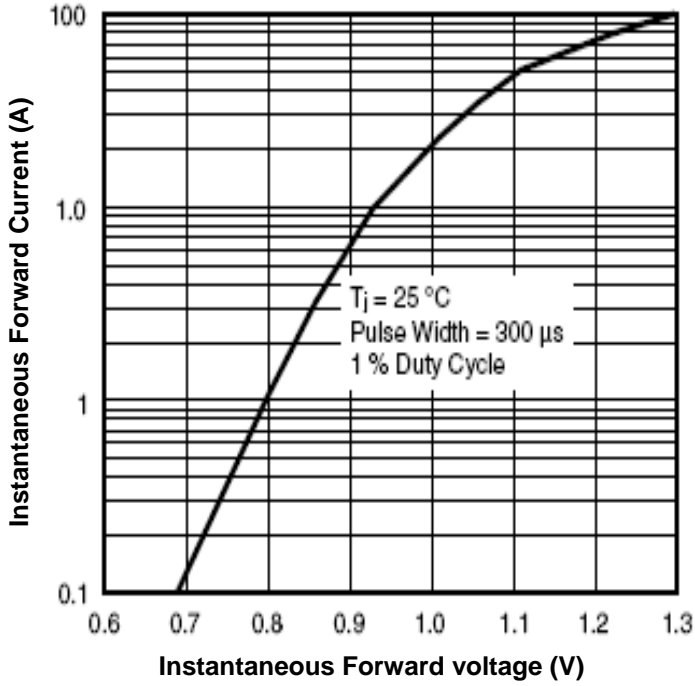


Fig.4-Typical Reverse Characteristics per leg

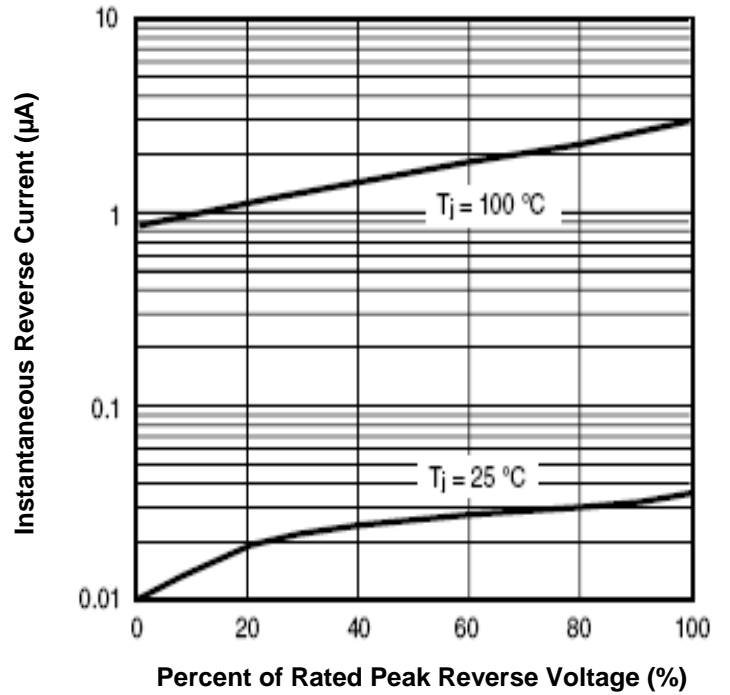
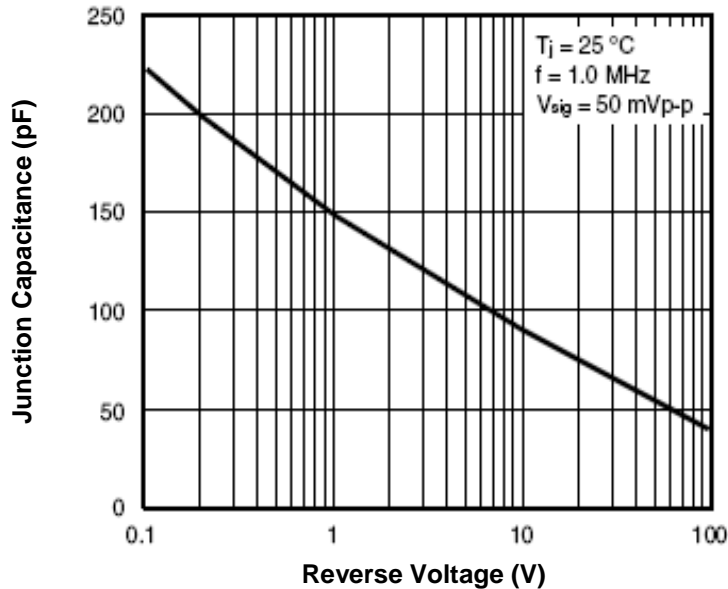
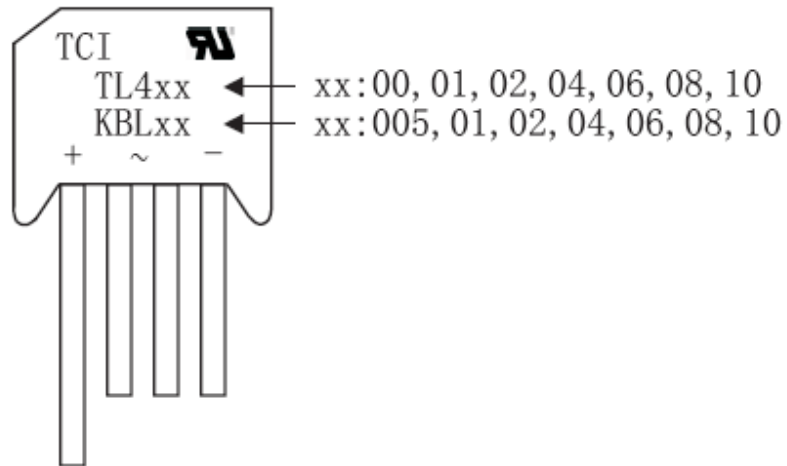


Fig.5- Typical Junction Capacitance per leg

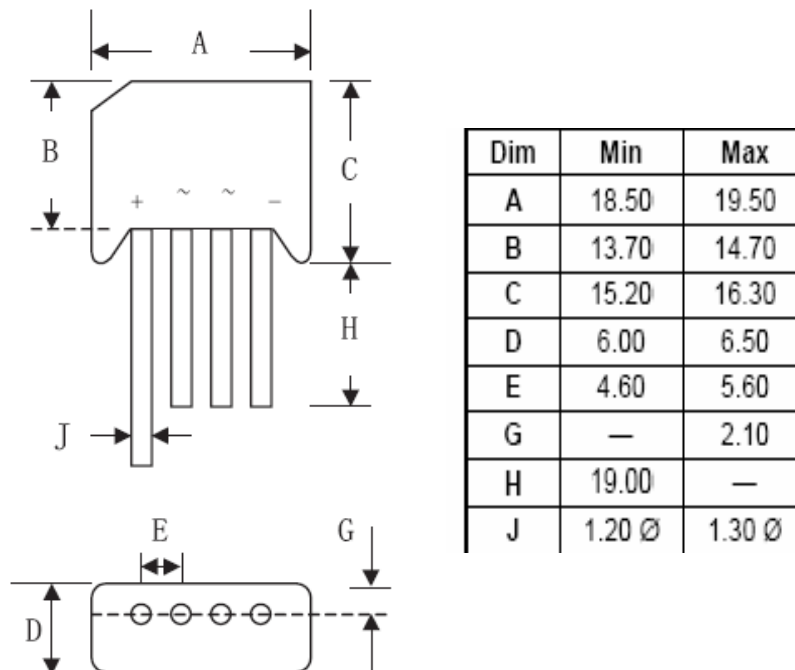


## TL400 - TL410/KBL005 - KBL10

### Marking Information:



### Dimensions in mm



TL

**How to contact us**

**US HEADQUARTERS**

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

**TAITRON COMPONENTS MEXICO, S.A .DE C.V.**

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.  
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

**TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA**

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

**TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE**

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931