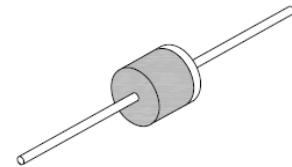


### 6.0A Fast Recovery Rectifier

#### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds  
.375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS Compliance



T6L



#### Mechanical Data

<b>Case:</b>	T6L (R-6), molded plastic
<b>Epoxy:</b>	UL 94V-0 rate flame retardant
<b>Terminals:</b>	Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	2.1 grams

#### Maximum Ratings and Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless noted otherwise)

Symbol	Description	TF 601L	TF 602L	TF 603L	TF 604L	TF 605L	TF 606L	TF 607L	Unit	Conditions
		FR 601	FR 602	FR 603	FR 604	FR 605	FR 606	FR 607		
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>I<sub>AV</sub></b>	Maximum Average Forward Rectified Current	6.0							A	T <sub>a</sub> =55 °C
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	300							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

## 6.0A Fast Recovery Rectifier

### TF601L - TF607L/FR601 - FR607

Symbol	Description	TF 601L	TF 602L	TF 603L	TF 604L	TF 605L	TF 606L	TF 607L	Unit	Conditions
		FR 601	FR 602	FR 603	FR 604	FR 605	FR 606	FR 607		
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.3							V	I <sub>F</sub> =6.0 A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	10							μA	TA=25° C
		200								TA=100° C
<b>T<sub>rr</sub></b>	Typical Reverse Recovery Time	150			250	500		nS	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>rr</sub> =0.25A	
<b>C<sub>J</sub></b>	Typical Junction Capacitance	100							pF	V <sub>R</sub> =4V, f=1MHz
<b>T<sub>J</sub></b>	Operating Temperature range	-55 to +125							° C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-55 to +150								

### Typical Characteristics Curves

Fig.1-Max. Forward Current Derating Curve

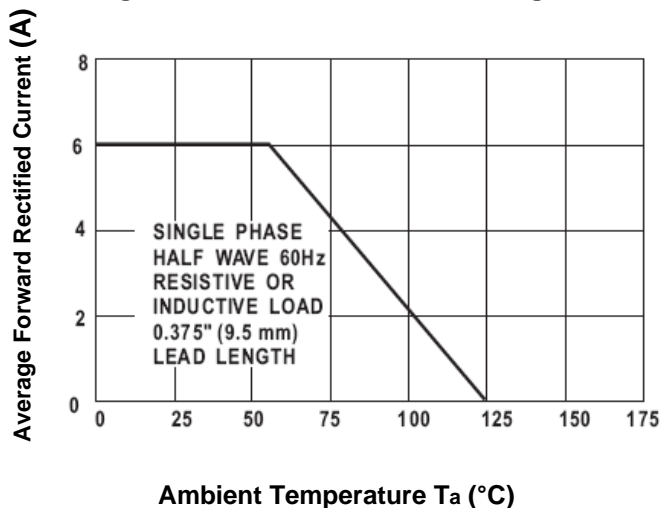
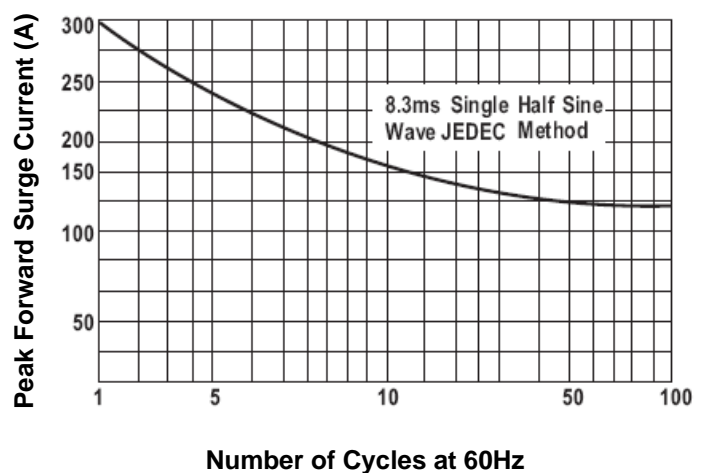


Fig.2-Max. Non-Repetitive Forward Surge Current



# 6.0A Fast Recovery Rectifier

## TF601L - TF607L/FR601 - FR607

Fig.3- Typical Forward Characteristics

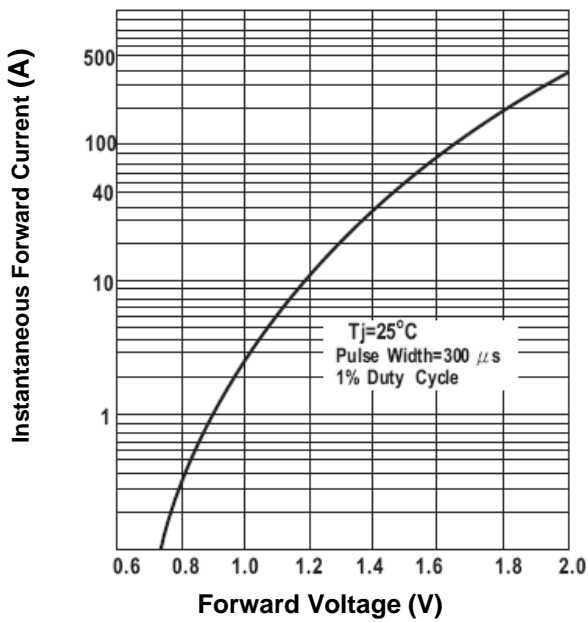
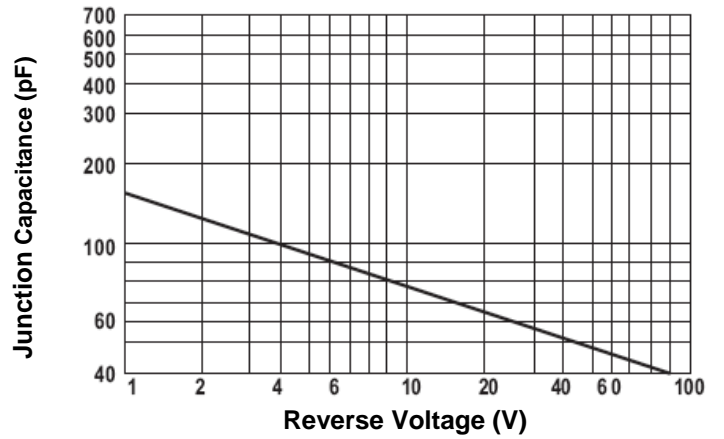
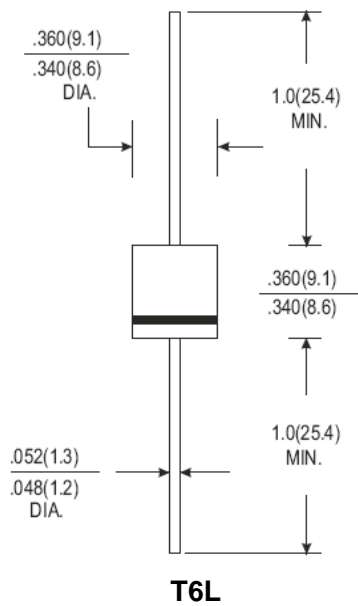


Fig.4- Typical Junction Capacitance



### Dimensions in inches (mm)



## 6.0A Fast Recovery Rectifier

TF601L - TF607L/FR601 - FR607

### 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 COMPONETS INCORPORATED E 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 COMPONETS 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