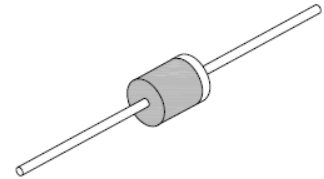


## 6.0A Fast Recovery Rectifier

### Features

- Low coat construction
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds  
/.375" (9.5mm) lead length, 5lbs (2.3kg) tension



T6

### Mechanical Data

<b>Case:</b>	T6, molded plastic
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Plated axial lead, solderable per MIL-STD-202E, method 208C
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	0.07ounce, 2.0 grams

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

Symbol	Description	TF 601	TF 602	TF 603	TF 604	TF 605	TF 606	TF 607	Unit	Conditions
<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	0.375"(9.5mm) lead length at $T_A=75^\circ\text{C}$
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	250							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.3							V	I <sub>F</sub> =6.0 A

# 6.0A Fast Recovery Rectifier

## TF601 - TF607

Symbol	Description	TF 601	TF 602	TF 603	TF 604	TF 605	TF 606	TF 607	Unit	Conditions	
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	10							μA	TA=25° C	
		500								TA=100° C	
<b>T<sub>rr</sub></b>	Typical Reverse Recovery Time	150			250	500			nS	IF=0.5A, IR=1A, Irr=0.25A	
<b>C<sub>J</sub></b>	Typical Junction Capacitance	150								pF	VR=4V, f=1MHz
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance	10								° C/W	Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.board mounted
<b>T<sub>J</sub></b>	Operating Temperature range	-55 to +150								° C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-55 to +150								° C	

### Typical Characteristics Curves

Fig.1-Typical Forward Current Derating Curve

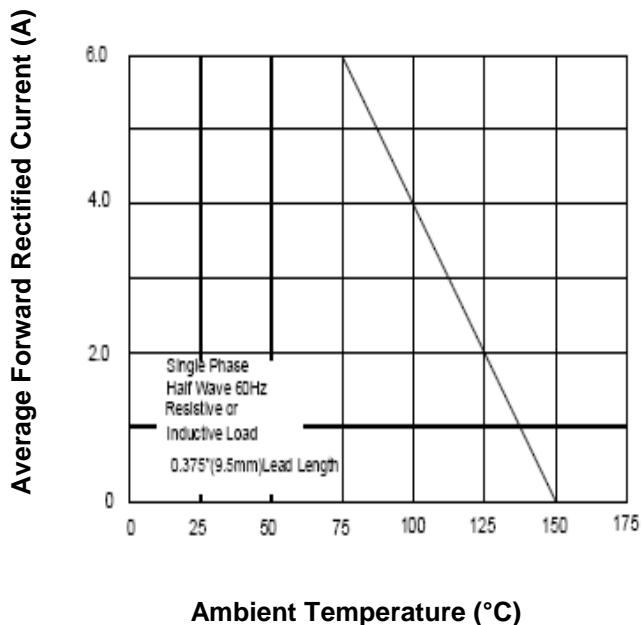
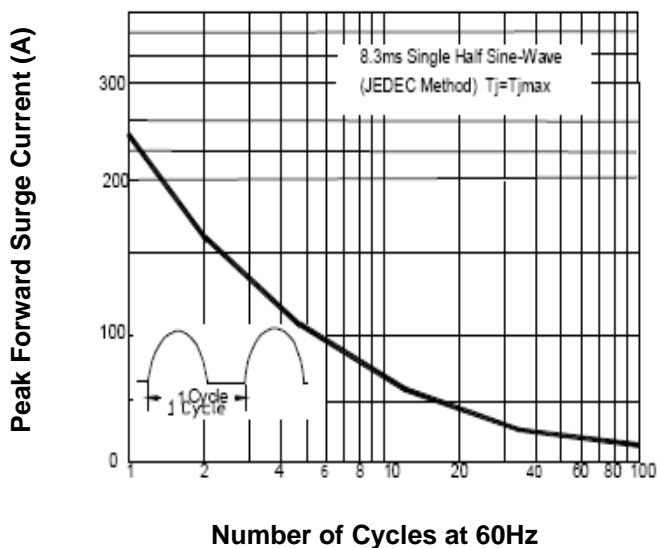
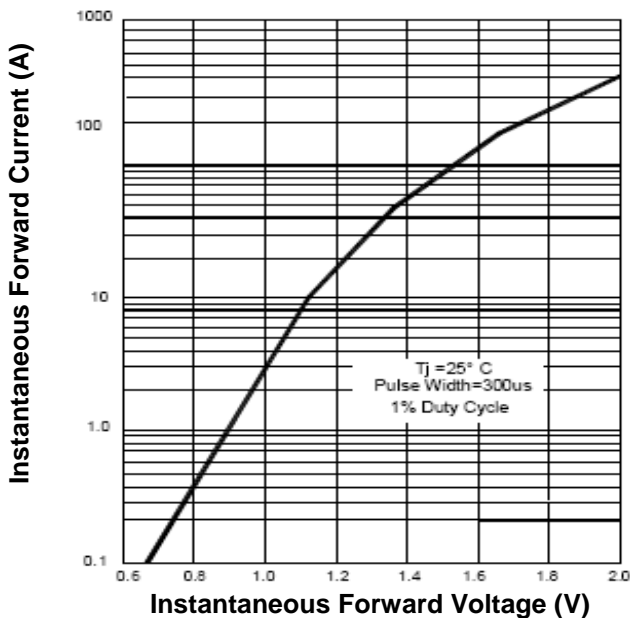


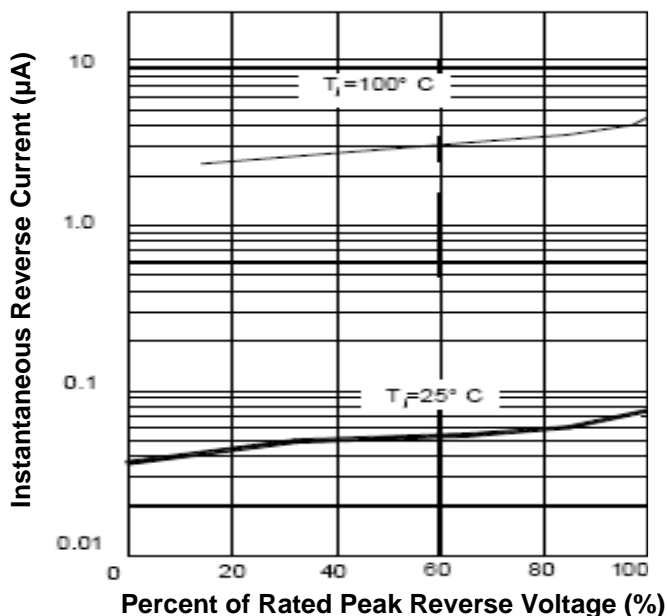
Fig.2-Max. Non-Repetitive Peak Forward Surge Current



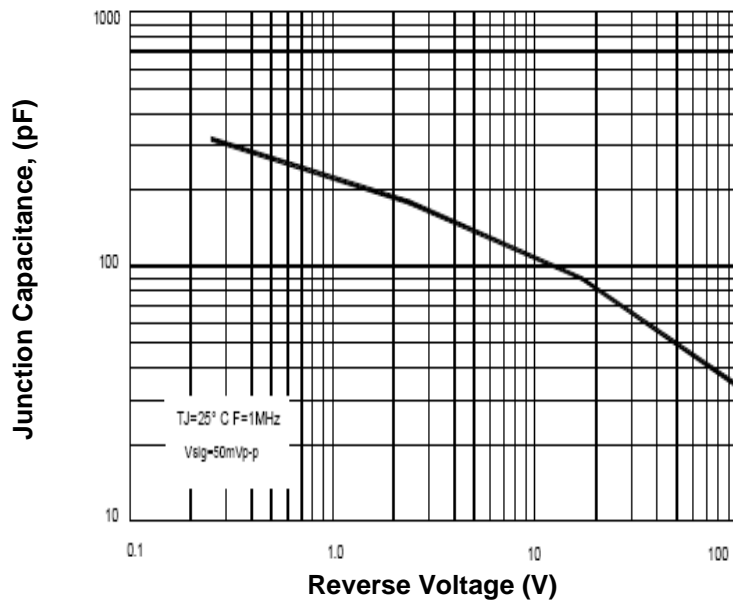
**Fig.3- Typical Instantaneous Forward Characteristics**



**Fig.4-Typical Reverse Characteristics**



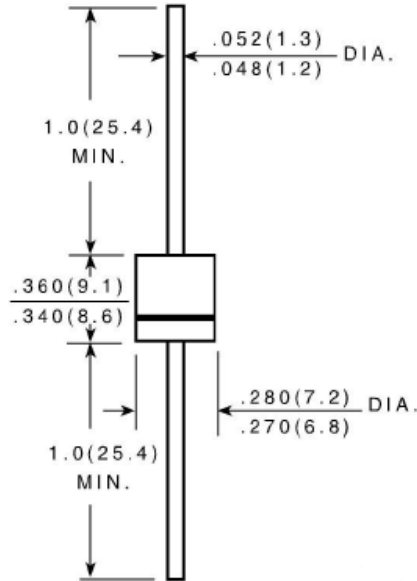
**Fig.5-Typical Junction Capacitance**



# 6.0A Fast Recovery Rectifier

## TF601 - TF607

### Dimensions in inches (mm)



T6

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