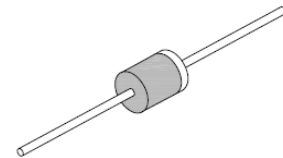


## 6.0A Ultra Fast Recovery Rectifier

### 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 at 5lbs (2.3kg) tension
- RoHS Compliance



T6



### Mechanical Data

<b>Case:</b>	T6, 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	TUF 601	TUF 602	TUF 603	TUF 604	TUF 605	TUF 606	TUF 607	Unit	Conditions
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	300	400	600	800	V	
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	35	70	140	210	280	420	560	V	
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	50	100	200	300	400	600	800	V	
<b>I<sub>o(AV)</sub></b>	Maximum Average Forward Rectified Current	6.0							A	$T_A=55^\circ\text{C}$
<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 Ultra Fast Recovery Rectifier

## TUF601 - TUF607

Symbol	Description	TUF 601	TUF 602	TUF 603	TUF 604	TUF 605	TUF 606	TUF 607	Unit	Conditions	
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.0			1.3		1.7		V	I <sub>F</sub> =6.0 A	
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	10.0								μA	TA=25° C
		200									TA=100° C
<b>T<sub>rr</sub></b>	Typical Reverse Recovery Time	50					75		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					65		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

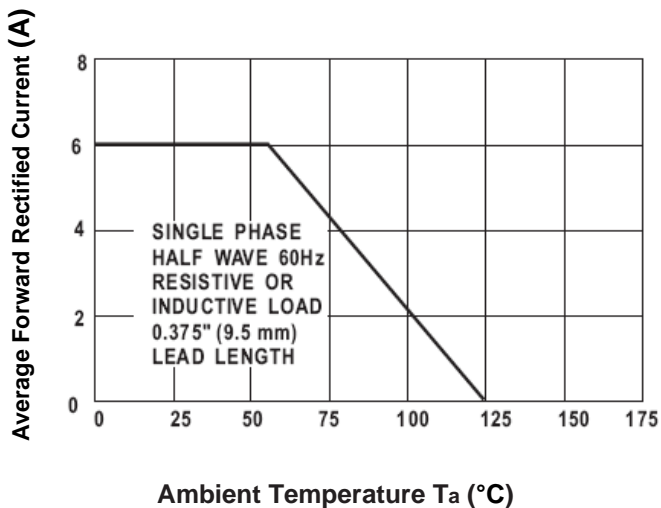
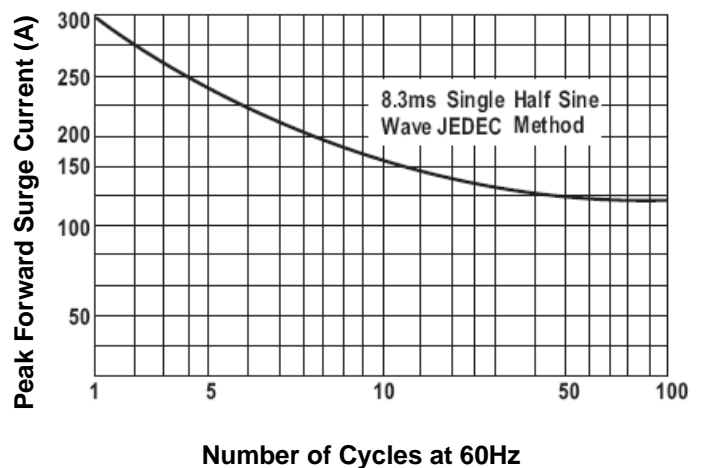


Fig.2-Max. Non-Repetitive Forward Surge Current



# 6.0A Ultra Fast Recovery Rectifier

## TUF601 - TUF607

Fig.3- Typical Forward Characteristics

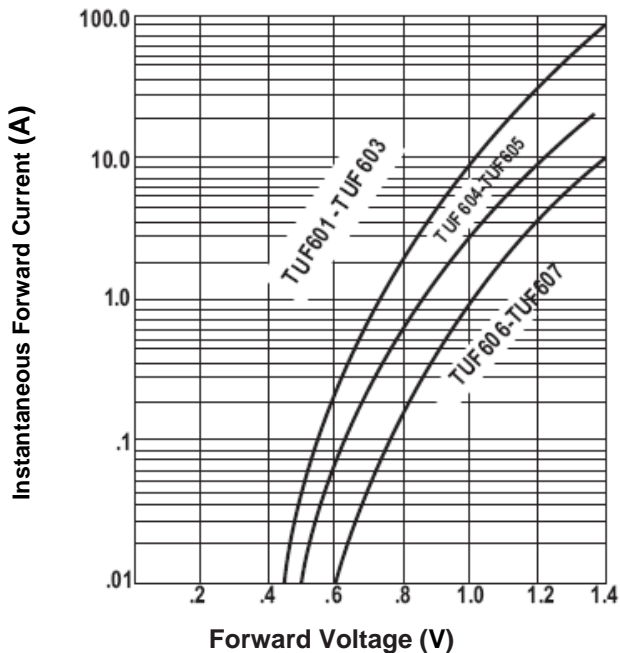


Fig.4-Typical Reverse Characteristics

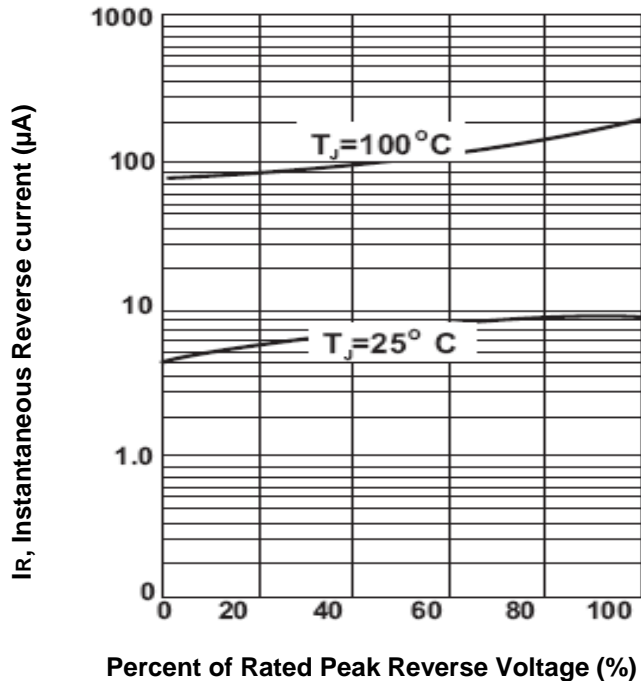
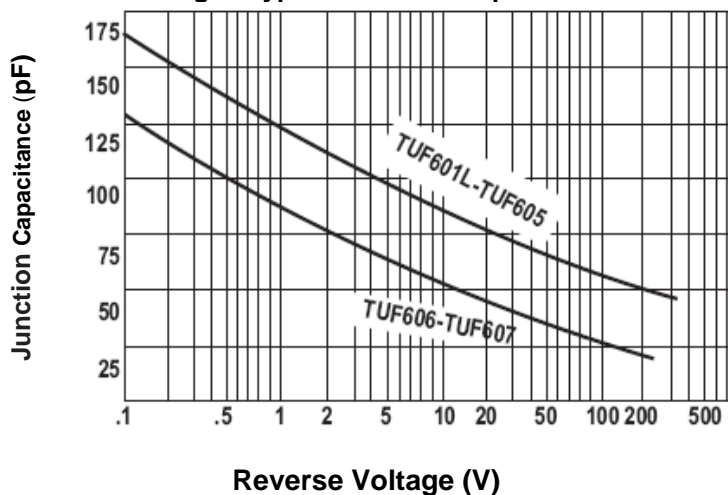


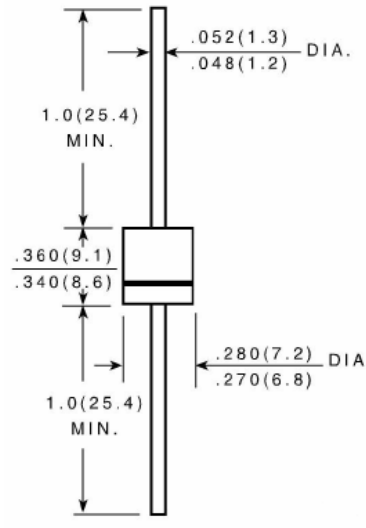
Fig.5- Typical Junction Capacitance



# 6.0A Ultra Fast Recovery Rectifier

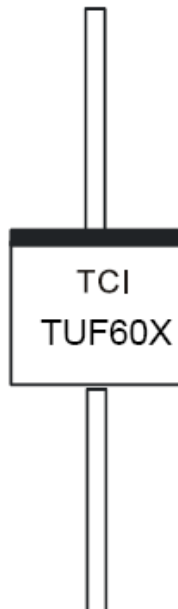
## TUF601 - TUF607

### Dimensions in inches (mm)



T6

### Marking Information:

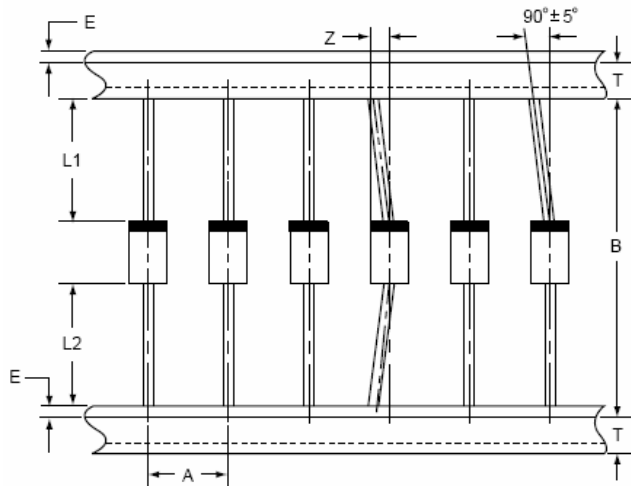


# 6.0A Ultra Fast Recovery Rectifier

## TUF601 - TUF607

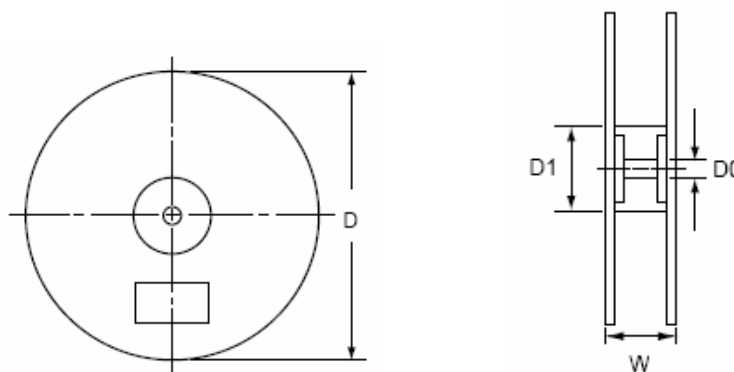
### Packing Information:

#### Carrier Tape Dimensions (in mm)



Components Outline	A	B	L1- L2	T	E	Z
T6	10±0.5	52.4+1.5/-0.4	Max.1.0	6.0±0.4	Max.0.8	Max.1.2

#### Reel Dimensions (in mm)



D	D0	D1	W
330.0	30.0±5.0	85.7±5.0	79.0±1.0

## 6.0A Ultra Fast Recovery Rectifier

### TUF601 - TUF607

#### Packing Quantity Information:

Type	PCS per Inner Box	PCS per Carton
-TR30 Tape & Reel	1000/Reel	4000
-BL Bulk	400	9600
-AR Ammo	400	7200

#### Carton Information:

Type	Carton Size
-TR30 Tape & Reel	360 X 350 X 345 ( in mm)
-BL Bulk	360 X 325 X 295 ( in mm)
-AR Ammo	500 X 280 X 305( in mm)

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