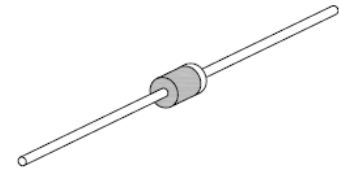


### 1.0A Fast Recovery Rectifier

#### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds  
.0375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS Compliance



DO-41



#### Mechanical Data

<b>Case:</b>	DO-41, 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>	0.34 gram

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

Symbol	Description	TF	TF	TF	TF	TF	TF	TF	Unit	Conditions
		101	102	103	104	105	106	107		
		FR	FR	FR	FR	FR	FR	FR		
		101	102	103	104	105	106	107		
<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	1.0							A	T <sub>a</sub> =55 °C
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	30							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

# 1.0A Fast Recovery Rectifier

## TF101 - TF107/FR101 -FR107

Symbol	Description	TF 101	TF 102	TF 103	TF 104	TF 105	TF 106	TF 107	Unit	Conditions
		FR 101	FR 102	FR 103	FR 104	FR 105	FR 106	FR 107		
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.3							V	I <sub>F</sub> =1.0 A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	T <sub>A</sub> =25° C
		100								T <sub>A</sub> =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	15							pF	V <sub>R</sub> =4V, f=1MHz
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance per leg	55							°C / W	
<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

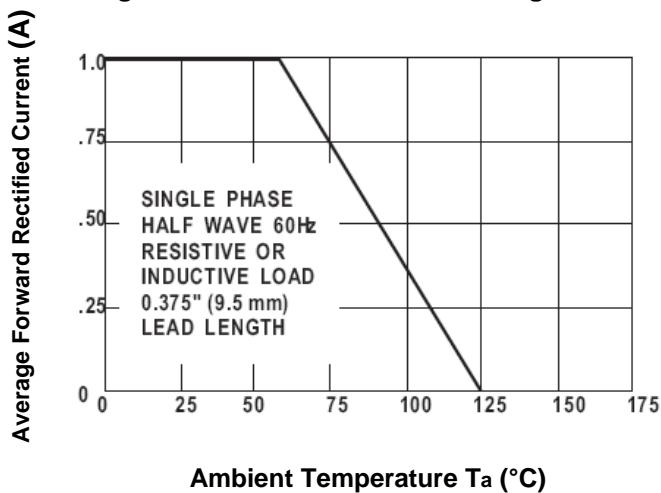
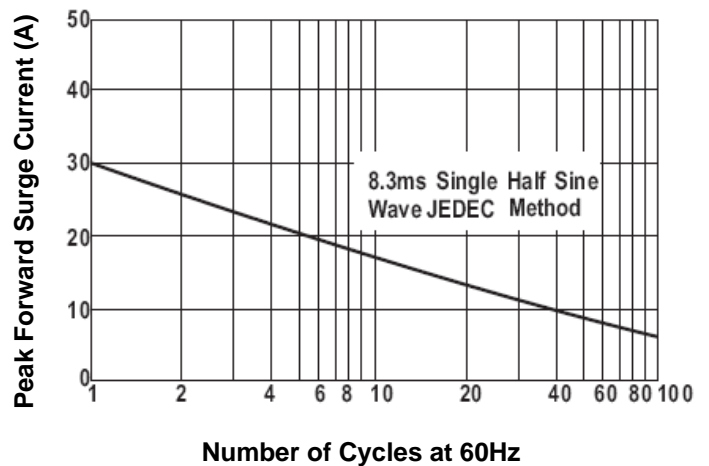


Fig.2-Max. Non-Repetitive Forward Surge Current



# 1.0A Fast Recovery Rectifier

## TF101 - TF107/FR101 -FR107

Fig.3- Typical Forward Characteristics

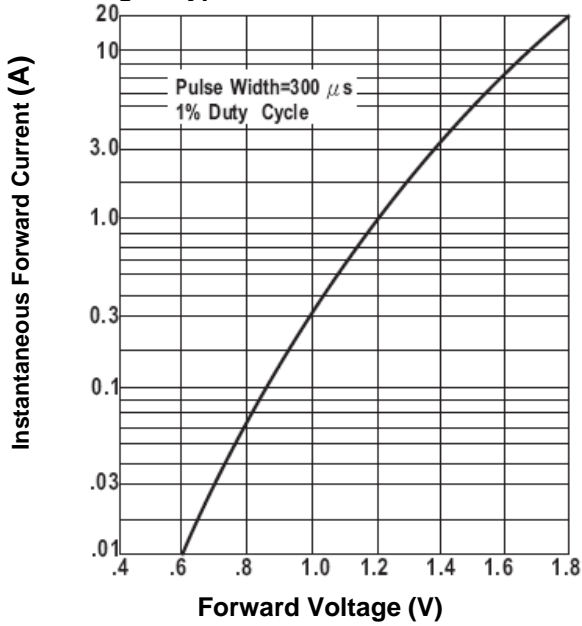
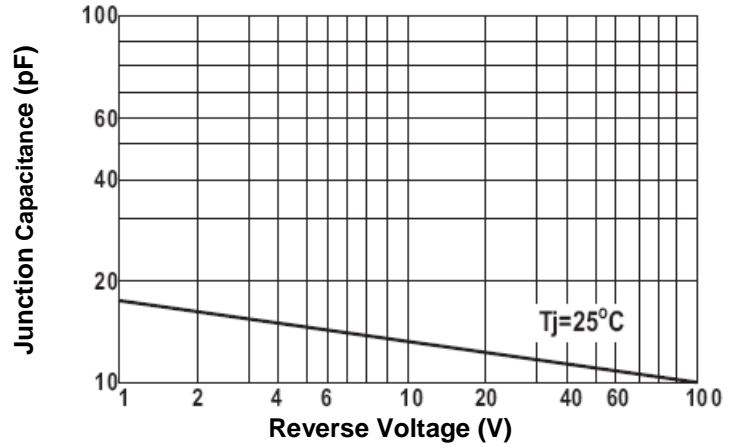
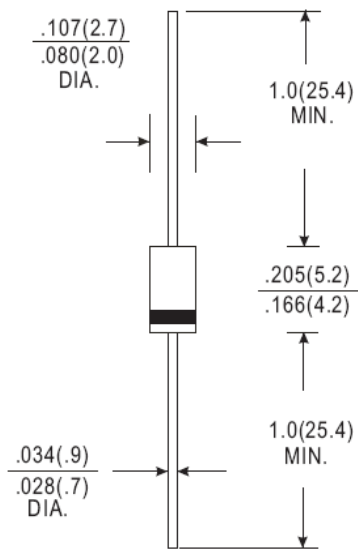


Fig.4- Typical Junction Capacitance



### Dimensions in inches (mm)



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# 1.0A Fast Recovery Rectifier

TF101 - TF107/FR101 -FR107

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