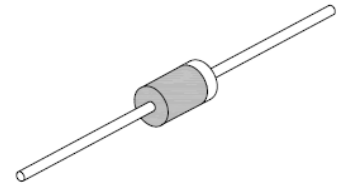


### 3.0A Fast Recovery Rectifier

#### Features

- Fast switching for high efficiency
- High surge current capability
- High temperature soldering guaranteed 250°C/10 seconds  
/.0375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS Compliance



DO-201AD



#### Mechanical Data

<b>Case:</b>	JEDEC DO-201AD, molded plastic body
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Plated axial leads, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	1.1 grams

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

Symbol	Description	MR850	MR851	MR852	MR854	MR856	MR858	Unit	Conditions
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	V	
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	35	70	140	280	420	560	V	
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	V	
<b>I<sub>F(AV)</sub></b>	Maximum Average Forward Rectified Current	3.0						A	T <sub>a</sub> =90 °C
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	200						A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)

# 3.0A Fast Recovery Rectifier

## MF850 - MR858

Symbol	Description	MR850	MR851	MR852	MR854	MR856	MR858	Unit	Conditions
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.3						V	I <sub>F</sub> =3.0 A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	10						μA	T <sub>A</sub> =25° C
		150	200	250	300	500	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>R<sub>thJA</sub></b> <b>R<sub>thJL</sub></b>	Typical Thermal Resistance	22 8.0						°C / W	Note
<b>C<sub>J</sub></b>	Typical Junction Capacitance	28						pf	V <sub>R</sub> =4V, f=1MHz
<b>T<sub>J</sub></b>	Operating Temperature range	-50 to +150						°C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-50 to +150							

**Note:** Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length, with both leads equally heat sink.

### Typical Characteristics Curves

Fig.1-Max. Forward Current Derating Curve

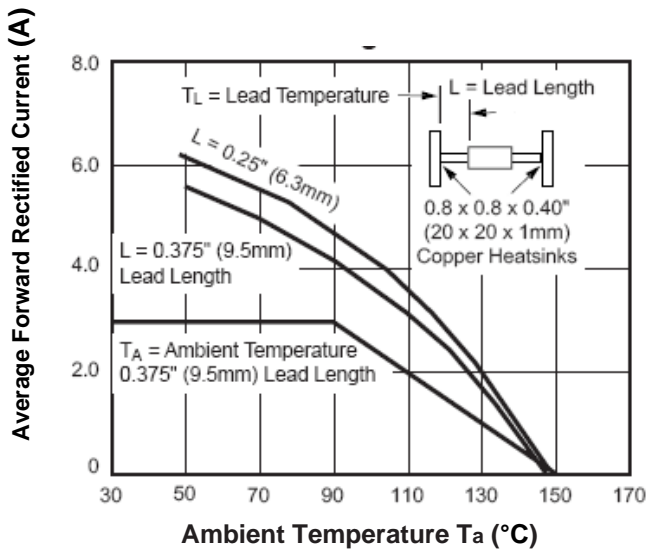
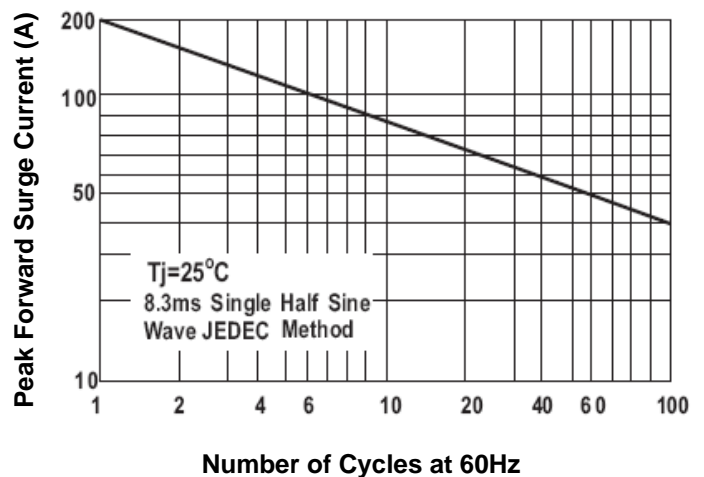


Fig.2-Max. Non-Repetitive Forward Surge Current



# 3.0A Fast Recovery Rectifier

## MF850 - MR858

Fig.3- Typical Forward Characteristics

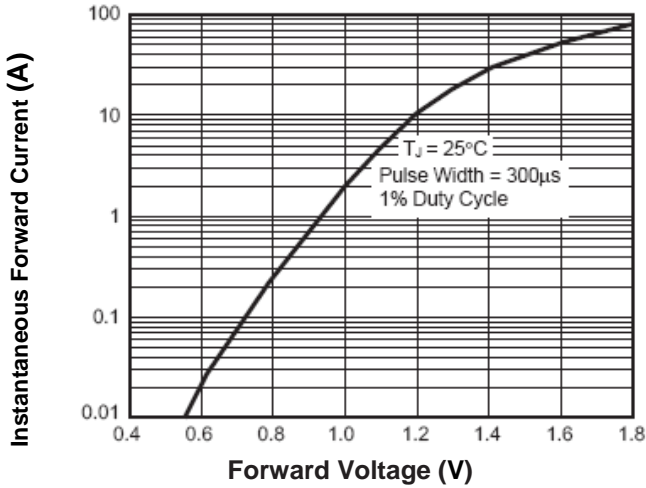
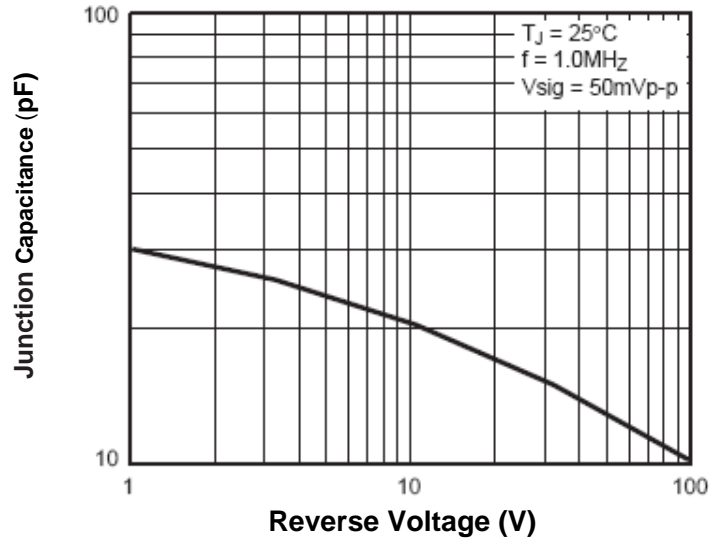
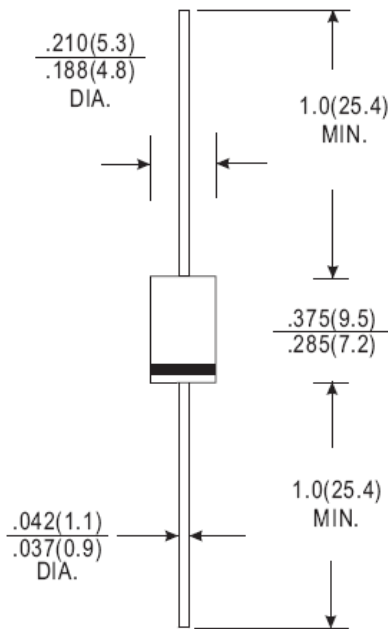


Fig.4- Typical Junction Capacitance



### Dimensions in inches (mm)



D0-201AD

## 3.0A Fast Recovery Rectifier

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MF850 – MR858

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