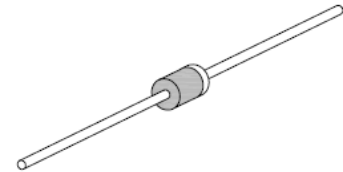


### 0.5A High Voltage Fast Recovery Rectifiers

#### Features

- Fast switching
- Low leakage
- High surge capability
- High current capability
- High temperature soldering guaranteed: 260° C /10 seconds.  
0.375" (9.5mm) lead length at 5lbs. (2.3kg) tension
- RoHS compliance



DO-41



#### Mechanical Data

<b>Case:</b>	JEDEC DO-41 molded plastic body
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Plated axial leads, solderable per MIL-STD-202E, Method 208C
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	0.012 ounces, 0.34 gram

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

Symbol	Description	GF515	GF518	GF520	Unit	Conditions
<b>VRRM</b>	Maximum Recurrent Peak Reverse Voltage	1500	1800	2000	V	
<b>VRMS</b>	Maximum RMS Voltage	1050	1260	1400	V	
<b>VDC</b>	Maximum DC Blocking Voltage	1500	1800	2000	V	
<b>IF(AV)</b>	Maximum Average Forward Rectified Current	0.5			A	0.375" (9.5mm) Lead Length at $T_A = 50^{\circ}\text{C}$
<b>IFSM</b>	Peak Forward Surge Current	30			A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>VF</b>	Maximum Instantaneous Forward Voltage	2.0		3.0	V	IF=0.5A
<b>IR</b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0			$\mu\text{A}$	$T_A=25^{\circ}\text{C}$

# 0.5A High Voltage Fast Recovery Rectifiers

## GF515 - GF520

Symbol	Description	GF515	GF518	GF520	Unit	Conditions
$I_{R(AV)}$	Maximum Full Load Reverse Current, Full Cycle Average 0.375" (9.5mm) Lead Length at $T_A = 55^\circ\text{C}$		100		$\mu\text{A}$	
$T_{rr}$	Maximum Reverse Recovery Time		500		nS	$I_F=0.5\text{A}$ , $I_R=1\text{A}$ , $I_{rr}=0.25\text{A}$
$T_J, T_{STG}$	Operating and Storage Temperature Range		-65 to +150		$^\circ\text{C}$	

### Typical Characteristics Curves

Fig.1-Typical Forward Current Derating Curve

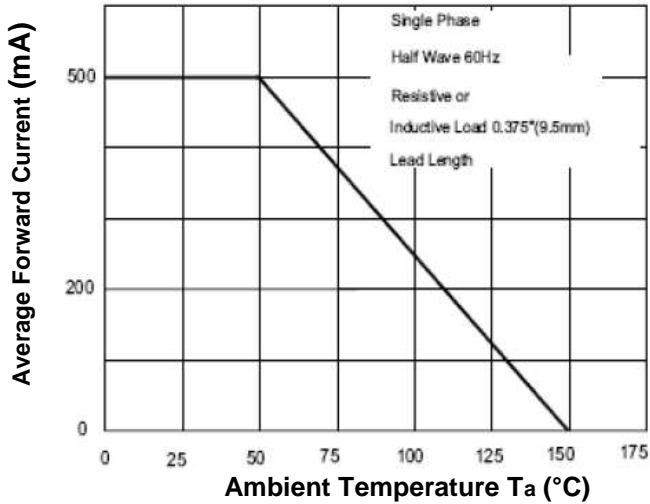


Fig.2-Max. Non-Repetitive Forward Surge Current

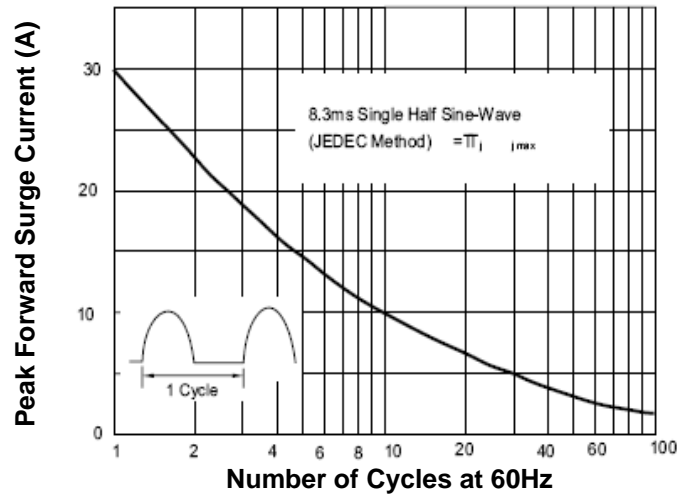
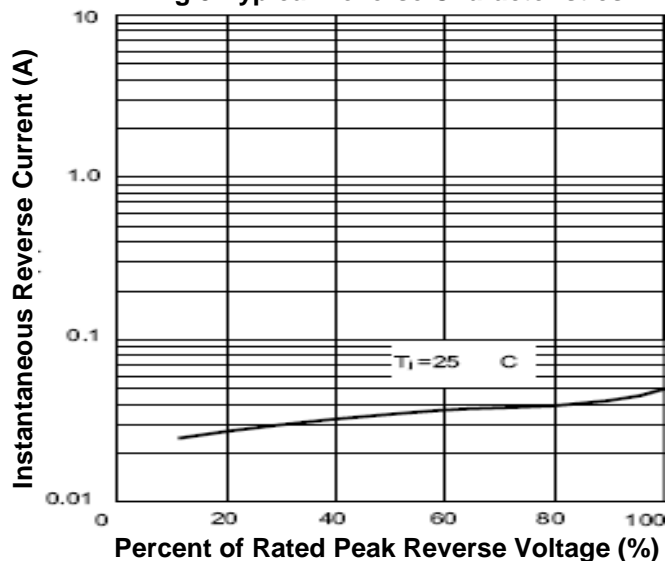


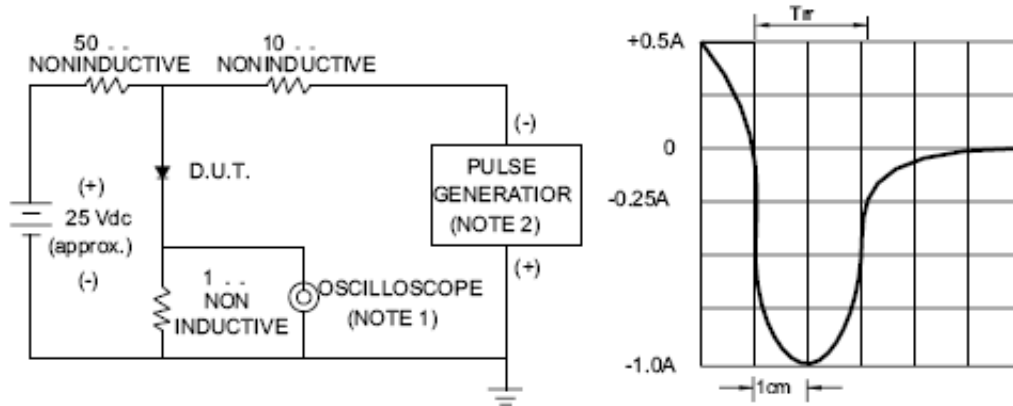
Fig.3-Typical Reverse Characteristics



# 0.5A High Voltage Fast Recovery Rectifiers

## GF515 - GF520

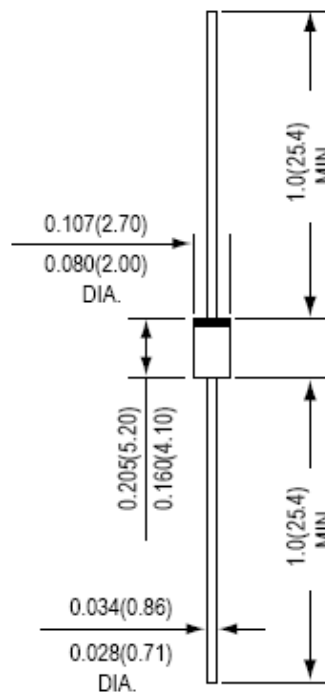
Fig.4-Test Circuit Diagram and Reverse Recovery Time Characteristics



- NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm, 22pF  
 2. Rise time = 10ns max. Source Impedance = 50 ohms

SET TIME BASE FOR  
50/100ns/cm

### Dimensions in inches (mm)



DO-41

# 0.5A High Voltage Fast Recovery Rectifiers

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GF515 - GF520

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