

## SUPER FAST RECTIFIERS

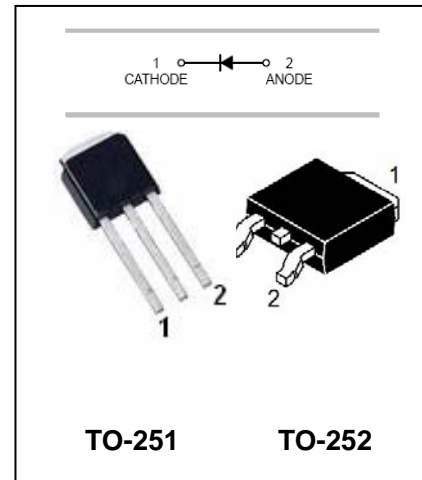
## GF520D-GF560D

### FEATURES

- Low cost.
- Low leakage.
- Low forward voltage drop.
- High current capability.
- Easily cleaned with Alcohol, Isopropanol and similar solvents.
- The plastic material carries U/L recognition 94V-0.



Lead-free



### MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	GF 520D	GF 530D	GF 540D	GF 550D	GF 560D	Unit
$V_{RRM}$	Reverse Peak Reverse Voltage	200	300	400	500	600	V
$V_{RMS}$	RMS Voltage	140	210	280	350	420	V
$V_{DC}$	DC Blocking Voltage	200	300	400	500	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ\text{C}$	5.0					A
$I_{FSM}$	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	60					A
$T_j$ $T_{stg}$	Operating Junction and Storage Temperature Range	-55 to +150					$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

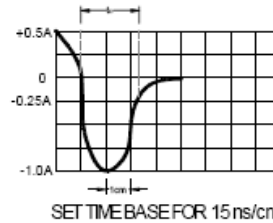
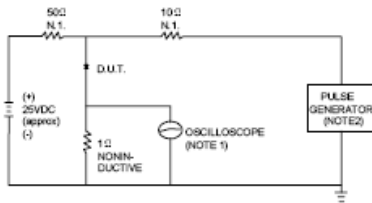
Parameter	Symbol	Test conditions	MAX			UNIT
			GF520D	GF530D- GF540D	GF550D- GF560D	
Forward Voltage	$V_F$	$I_F=5\text{A}$	0.98	1.3	1.7	V
Reverse Current	$I_R$	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=100^\circ\text{C}$	5.0 250	10 400		$\mu\text{A}$
Reverse Recover Time	$t_{rr}$	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	30			ns

# SUPER FAST RECTIFIERS

# GF520D-GF560D

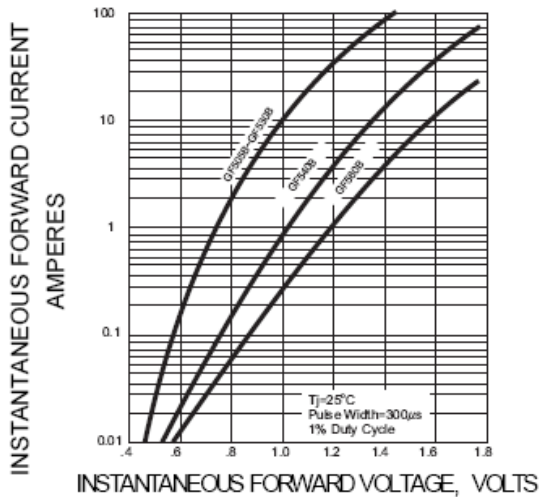
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

**FIG.1 -- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**

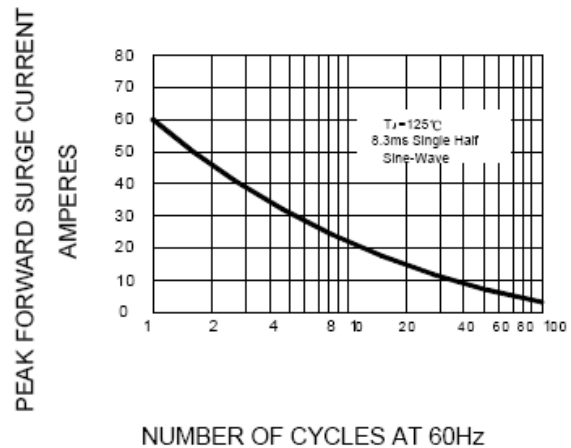


NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1MΩ, 22pF.  
2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω.

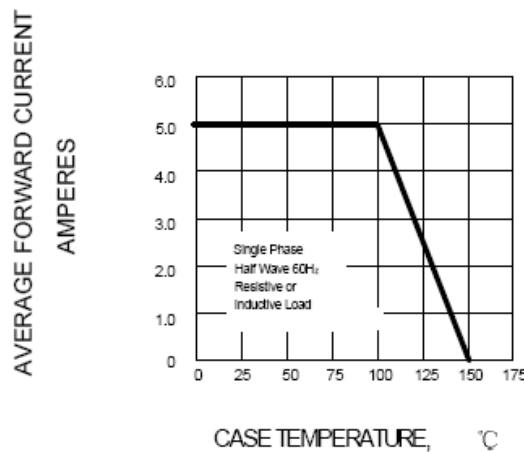
**FIG.2 -- TYPICAL FORWARD CHARACTERISTIC**



**FIG.3 -- PEAK FORWARD SURGE CURRENT**



**FIG.4 FORWARD DERATING CURVE**



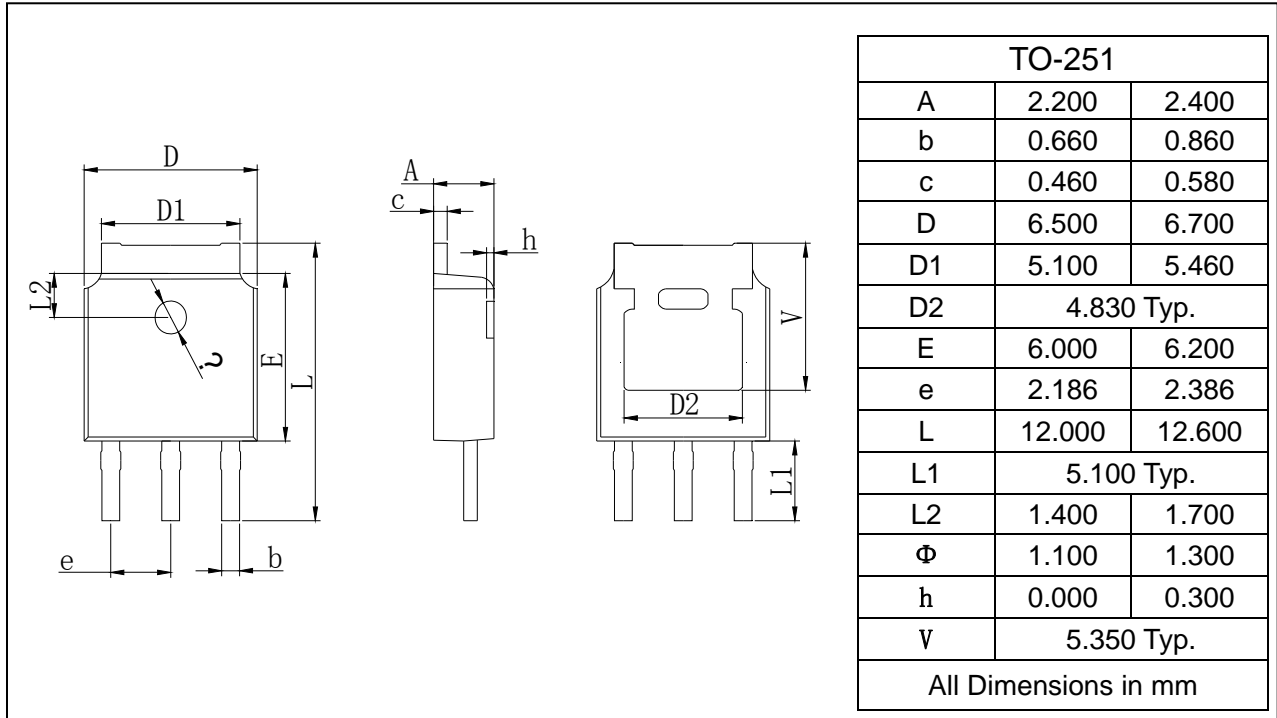
## SUPER FAST RECTIFIERS

## GF520D-GF560D

### PACKAGE OUTLINE

Plastic surface mounted package

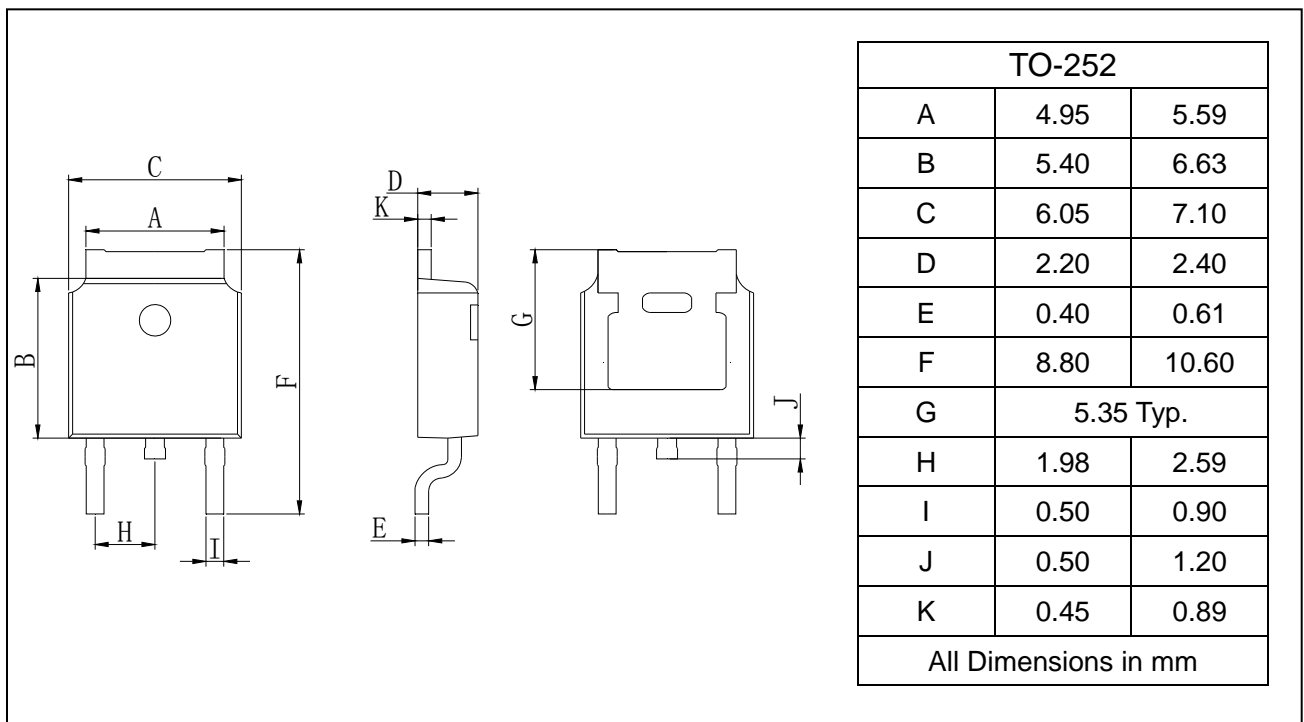
TO-251



### PACKAGE OUTLINE

Plastic surface mounted package

TO-252





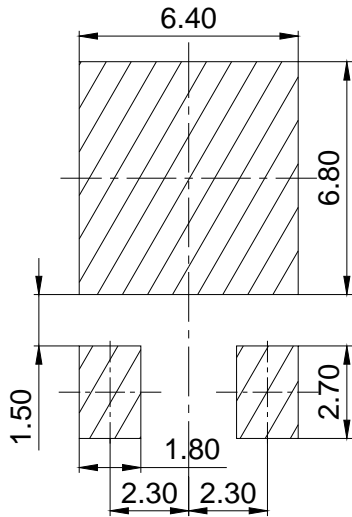
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## SUPER FAST RECTIFIERS

## GF520D-GF560D

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### SOLDERING FOOTPRINT



Unit:mm

### PACKAGE INFORMATION

Device	Package	Shipping
GF520D-GF560D	TO-251/252	80PCS/Tube
	TO-252	2500PCS/Tape&Reel