

# GSSUF5401 Series

## Axial Lead Ultra Fast Rectifiers

### Product Description

Reverse Voltage 100V To 800V Forward Current  
3.0A

### Features

- Low Forward Voltage Drop
- High Current Capacity
- High Reliability
- High Surge Current Capability
- High Speed Switching
- Lead(Pb)-Free

### Mechanical Data

- Case : Molded Plastic
- Epoxy : UL 94V-0 rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 1.10 grams

### Packages



DO-201AD

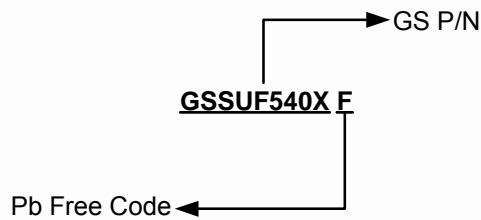
### Marking Information

Part Number	Package	Marking
GSSUF5401F	DO-201AD	WTYYWW UF5401.
GSSUF5402F	DO-201AD	WTYYWW UF5402.
GSSUF5403F	DO-201AD	WTYYWW UF5403.
GSSUF5404F	DO-201AD	WTYYWW UF5404.
GSSUF5405F	DO-201AD	WTYYWW UF5405.
GSSUF5406F	DO-201AD	WTYYWW UF5406.
GSSUF5407F	DO-201AD	WTYYWW UF5407.

※ "WT" GS Code & "YYWW" Date Code

※ "UF540X" GS P/N & "." Halogen Free

## Ordering Information



Part Number	Package	Quantity
GSSUF5401F Series	DO-201AD	5000 PCS

## Electrical Characteristics

Symbol	Conditions	UF5401	UF5402	UF5403	UF5404	Unit
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage	100	200	300	400	V
$V_{RMS}$	Maximum RMS Voltage	70	140	210	280	V
$V_R$	Maximum DC Blocking Voltage	100	200	300	400	V
$V_F$	Maximum Instantaneous Forward Voltage $I_F=3.0A$	1.0		1.3		V
$T_{rr}$	Maximum Reverse Recovery Time (1)	50				ns
Symbol	Conditions	UF5405	UF5406	UF5407	Unit	
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage	500	600	800	V	
$V_{RMS}$	Maximum RMS Voltage	350	420	560	V	
$V_R$	Maximum DC Blocking Voltage	500	600	800	V	
$V_F$	Maximum Instantaneous Forward Voltage $I_F=3.0A$	1.5		1.7	V	
$T_{rr}$	Maximum Reverse Recovery Time (1)	75			ns	
$C_J$	Diode Junction Capacitance $f=1.0MHz$ and applied 4V DC reverse voltage	75			pF	
$I_R$	Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage	$T_A=25^\circ C$	10		uA	
		$T_A=100^\circ C$	300			
$I_{F(AV)}$	Maximum Average Forward Rectified Current (See Fig.1)	3.0			A	
$I_{FSM}$	Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	150			A	
$R_{\theta JA}$	Thermal Resistance	60			$^\circ C/W$	
$T_J$	Junction Temperature Range	-55 to +150			$^\circ C$	
$T_{STG}$	Storage Temperature Range	-55 to +150			$^\circ C$	

Notes: 1. Reverse Recovery Time test condition:  $I_F=3A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$

## Typical Characteristics

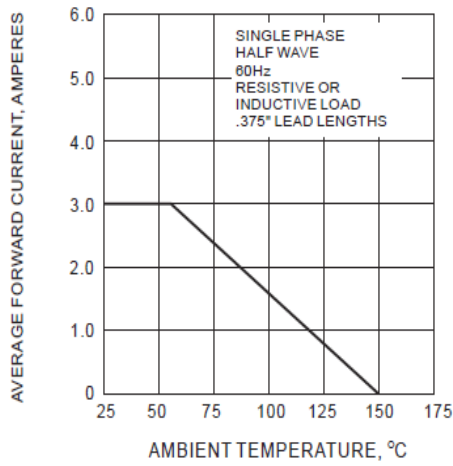


Fig. 1 - Forward Current Derating Curve

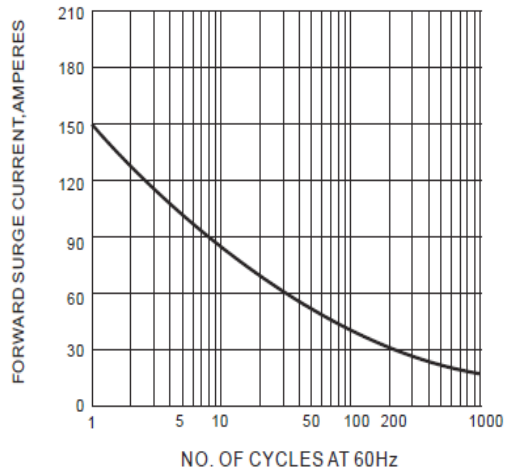


Fig. 2 - Peak Forward Surge Current

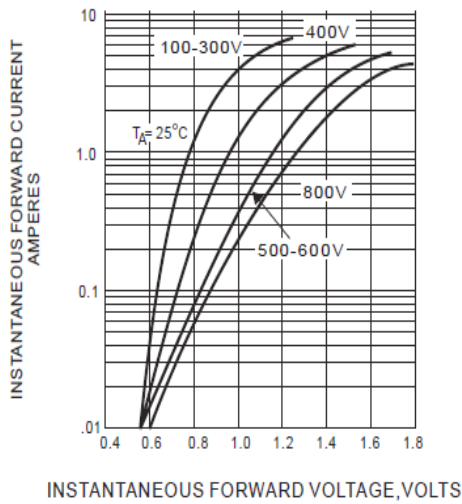


Fig. 3 - Typical Forward Characteristics

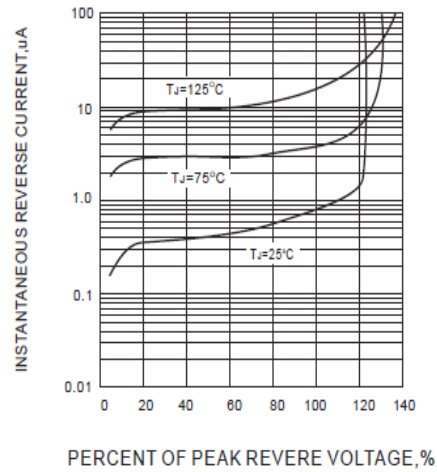
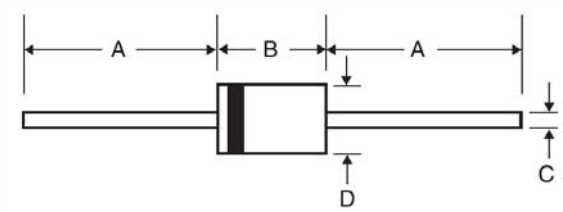


FIG.4 - Typical Reverse Leakage Characteristics

Package Dimension

DO-201AD



Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	25.40	-	1.000	-
B	7.30	9.50	0.287	0.374
C	1.20	1.30	0.047	0.051
D	4.80	5.60	0.188	0.220

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