# **GSD1N5820 Series**

### **Axial Lead Schottky Power Rectifiers**

### **Product Description**

Schottky Barrier Rectifiers 3.0A / 20V To 40V

#### **Features**

- Low Forward Voltage
- Low Switching Noise
- High Surge Capacity
- Guarantee Reverse Avalance
- Guard Ring for Stress Protection
- Low Power Loss & High Efficiency125°C Operating Junction Temperature
- Low Stored Charge Majority Carrier Conduction
- Lead(Pb)-Free

#### **Mechanical Data**

Case: JEDEC DO-201AD Molded PlasticPolarity: Collar Band Denotes Cathode

Weight: 1.1 gramsMounting Position: Any

### **Packages**



### **Marking Information**

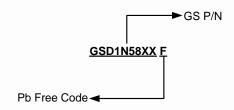
Part Number	Package	Marking
GSD1N5820F	DO-201AD	WTYYWW 1N5820.
GSD1N5821F	DO-201AD	WTYYWW 1N5821.
GSD1N5822F	DO-201AD	WTYYWW 1N5822.

"WT" GS Code & "YYWW" Date Code

\* "1N58XX" GS P/N & "." Halogen Free



# **Ordering Information**



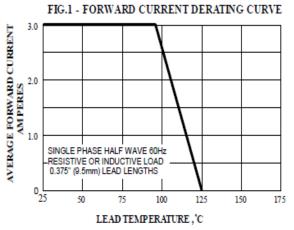
Part Number	Package	Quantity
GSD1N5820F Series	DO-201AD	5000 PCS

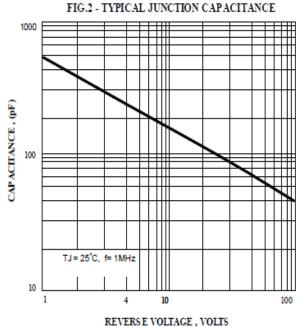
### **Electrical Characteristics**

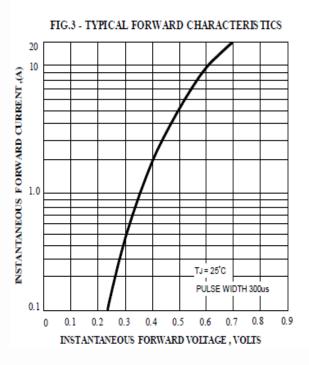
Symbol	Conditions	1N5820	1N5821	1N5822	Unit
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	20	30	40	V
V <sub>RMS</sub>	Maximum RMS Voltage	14	21	28	V
V <sub>F</sub>	Maximum Instantaneous Forward Voltage (I <sub>F</sub> =1.0Amp) (I <sub>F</sub> =3.0Amp)	0.475 0.85	0.5 0.9	0.525 0.95	V
I <sub>F(AV)</sub>	Average Rectifier Forward Current	3.0		Α	
I <sub>FSM</sub>	Non-Repetitive Peak Square Current (Surge Applied at Rated Load Condition Half ware, Single Phase, 60Hz)	80		А	
C <sub>P</sub>	Typical Junction Capacitance (V <sub>R</sub> =4.0V, f=1.0MHz)		250		pF
I <sub>R</sub>	Maximum Instantaneous Reverse Current (Rated DC Voltage, T <sub>C</sub> =25°C)	2.0		mA	
IR	Maximum Instantaneous Reverse Current (Rated DC Voltage, T <sub>C</sub> =100°C)	20			IIIA
TJ	Junction Temperature Range -65 to +125			°C	
T <sub>STG</sub>	Storage Temperature Range		-65 to +125		°C

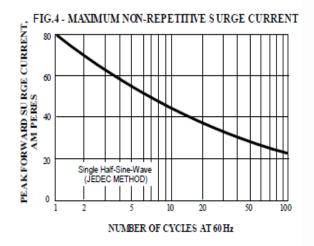


### **Typical Characteristics**



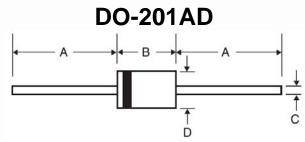








# **Package Dimension**



Dimensions				
Symbol	Millimeters		In	ches
Gymbol	Min	Max	Min	Max
Α	25.40	-	1.000	-
В	7.30	9.50	0.287	0.374
С	1.20	1.30	0.047	0.051
D	4.80	5.60	0.188	0.220



### **NOTICE**

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