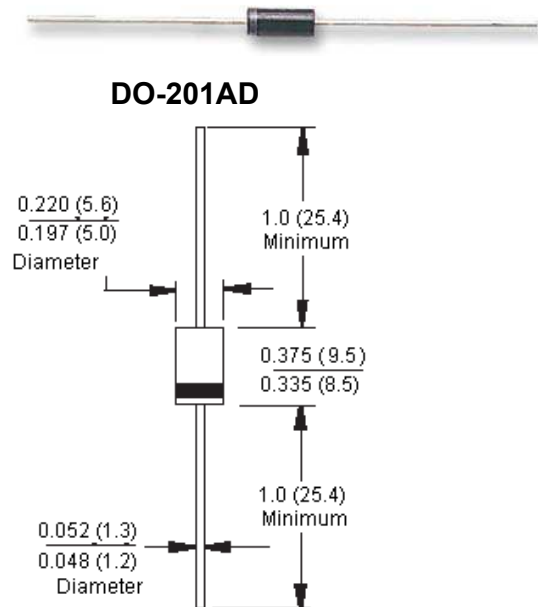


# 1N5820 Series

## Power Diodes - Schottky



### 3A Axial



Dimensions : Inches (Millimetres)

### Features:

- Low forward voltage drop.
- High current capability.
- High reliability.
- High surge current capability.

### Mechanical Data:

Cases : Moulded plastic DO-201AD.  
Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed.  
Polarity : Colour band denotes cathode end.  
High temperature : 260°C/10 seconds/0.375", (9.5mm) lead soldering guaranteed lengths at 5lbs., (2.3kg) tension.

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	1N5820	1N5821	1N5822	Unit
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	
Maximum average forward rectified current 0.375" (9.5mm) Lead Length at $T_L = 90^\circ\text{C}$	$I_{(AV)}$	3.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	80			
Maximum instantaneous forward voltage at 3.0A	$V_F$	0.475	0.500	0.525	V
Maximum instantaneous forward voltage at 9.0A		0.850	0.900	0.950	V
Maximum DC reverse current at $T_A = 25^\circ\text{C}$ at rated DC blocking voltage at $T_A = 100^\circ\text{C}$	$I_R$	2.0 20			mA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	40			°C/W
Typical junction capacitance (Note 2)	$C_J$	200			pF
Operating temperature range	$T_j$	-65 to +125			°C
Storage temperature range	$T_{stg}$				

### Notes:

1. Mount on Cu-pad size 16mm x 16mm on PCB.
2. Measured at 1MHz and applied reverse voltage of 4.0V dc.



# 1N5820 Series

## Power Diodes - Schottky



### Ratings and Characteristic Curves

Figure 1 Maximum Forward Current Derating Curve

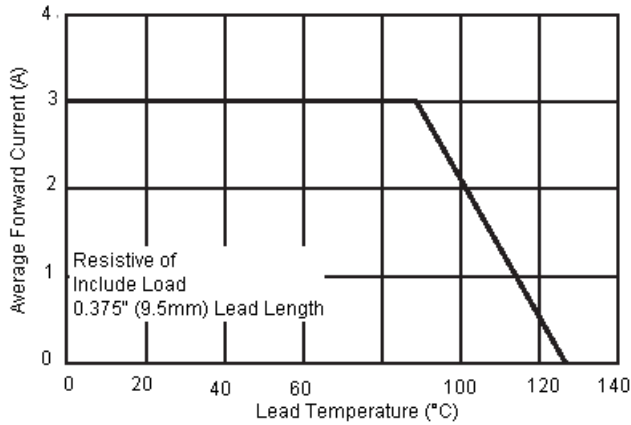


Figure 2 Typical Reverse Characteristics

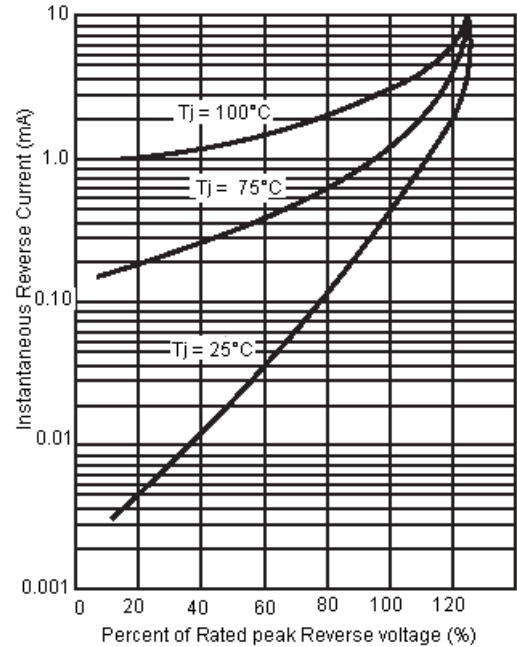


Figure 3 Maximum Non-Repetitive Forward Surge Current

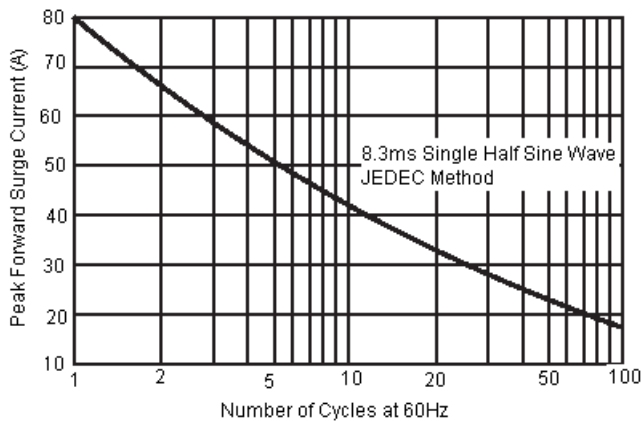
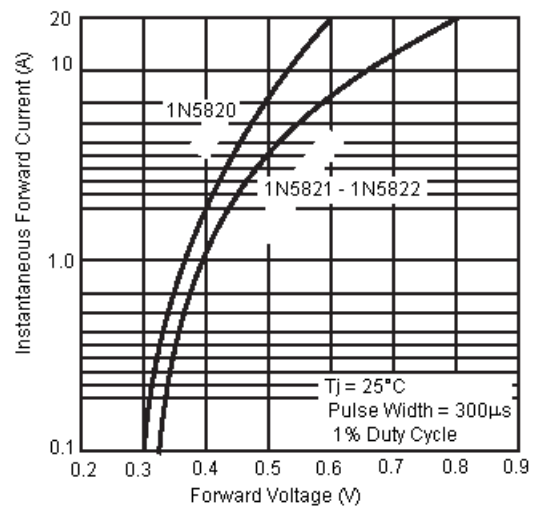


Figure 4 Typical Forward Characteristics

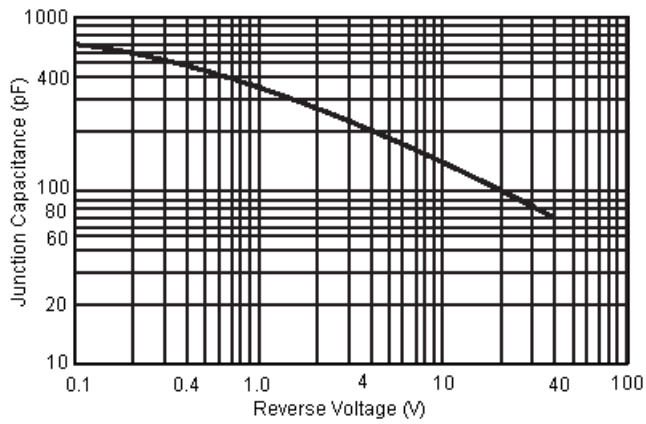


# 1N5820 Series

## Power Diodes - Schottky



Figure 5 Typical Junction Capacitance



### Specifications

$I_F$ (av) maximum (A)	$V_{RRM}$ maximum (v)	$V_F$ (V) at $I_F = 3A$	$I_{FSM}$ (A)	Length	Diameter	Package	Part Number
3	20	0.47	80	9.5	5.6	DO-201AD	1N5820
	30	0.5					1N5821
	40	0.52					1N5822

Dimensions : Millimetres



# 1N5820 Series

## Power Diodes - Schottky



### Notes:

### International Sales Offices:

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