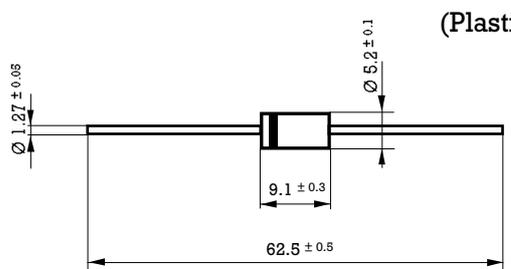


### 3 Amp. Schottky Barrier Rectifier

<p>Dimensions in mm.</p>  <p>DO-201AD (Plastic)</p> <p><b>Mounting instructions</b></p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350 °C.</li> <li>3. Max. soldering time, 3.5 sec.</li> <li>4. Do not bend lead at a point closer than 3 mm. to the body.</li> </ol>	<p><b>Voltage</b> 20 V to 40 V</p> <p><b>Current</b> 3.0 A at 95 °C.</p>
<ul style="list-style-type: none"> <li>• <b>Metal Silicon Junction, majority carrier conduction</b></li> <li>• High current capability, low forward voltage drop</li> <li>• Guardring for overvoltage protection</li> <li>• Low power loss, high efficiency</li> <li>• High surge capability</li> <li>• Plastic material carries U/L recognition 94 V-O</li> <li>• Terminals: Axial Leads</li> <li>• Polarity: Colour band denotes cathode</li> </ul>	

#### Maximum Ratings, according to IEC publication No. 134

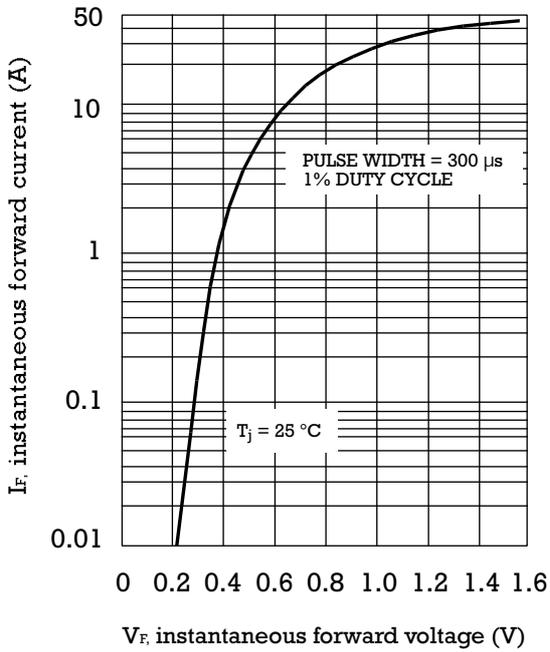
		1N5820	1N5821	1N5822
$V_{RRM}$	Peak recurrent reverse voltage (V)	20	30	40
$V_{RMS}$	Maximum RMS voltage (V)	14	21	28
$V_{DC}$	Maximum DC blocking voltage (V)	20	30	40
$V_{RSM}$	Maximum non-repetitive peak reverse voltage (V)	24	36	48
$I_{F(AV)}$	Maximum average Forward current. 9.5 mm lead length at $T_L = 95\text{ °C}$	3 A		
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	80 A		
$T_j$	Operating temperature range	- 65 to + 125 °C		
$T_{stg}$	Storage temperature range	- 65 to + 125 °C		

#### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

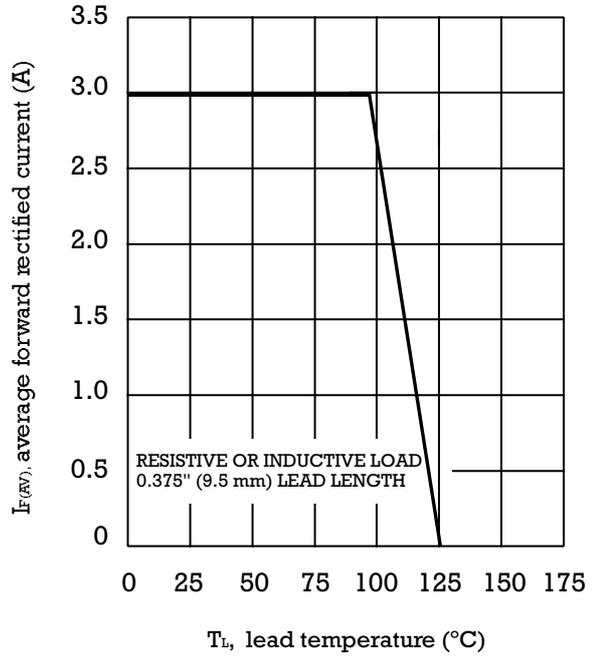
$V_F$	Max. forward voltage drop at $I_F = 3.0\text{ A}$	0.55 V
$I_R$	Max. Instantaneous reverse current at $V_{RRM}$ $T_a = 25\text{ °C}$ $T_a = 100\text{ °C}$	2 mA 20 mA
$R_{thj-a}$ $R_{thj-l}$	Typical Thermal Resistance	40 °C/W 10 °C/W

NOTE: Thermal Resistance from junction to lead or to ambient PCB mounted with 12.7 mm lead length with 63.5x63.5 mm copper pads.

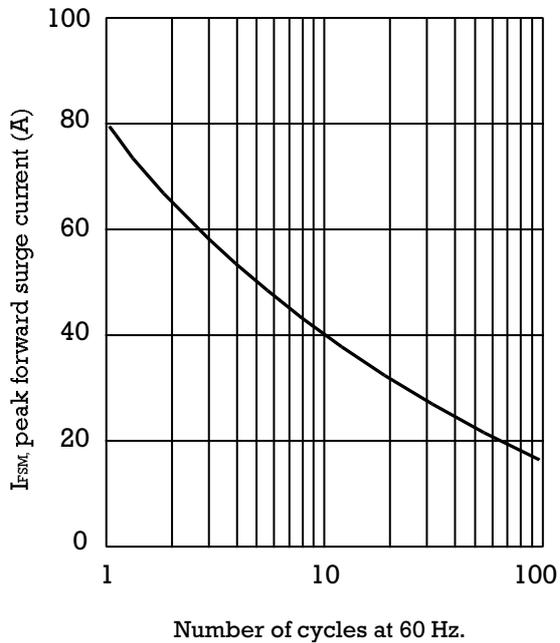
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

