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# H1N5820<sub>thru</sub> H1N5822

3.0 AMPS, SCHOTTKY BARRIER RECTIFIERS

#### **Features**

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

## **Mechanical Data**

- Cases: DO-201AD 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.
- High temperature soldering guaranteed: 250°C/10 seconds/.375"(9.5mm) lead lengths at 5 lbs., (2.3Kg) tension.
- Weight: 1.10 grams.

## **Maximum Ratings**

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

Type Number	H1N5820	H1N5821	H1N5822	Units
Maximum Recurrent Peak Reverse Voltage	20	30	40	V
Maximum RMS Voltage	14	21	28	V
Maximum DC Blocking Voltage	20	30	40	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @ TL=90°C		Α		
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		А		
Maximum Instantaneous Forward Voltage @ 3A	0.475	0.5	0.525	V
Maximum Instantaneous Forward Voltage @ 9A	0.85	0.9	0.95	V
Maximum DC Reverse Current At Rated DC	2 (@ Ta=25°C)			mΑ
Blocking Voltage	20 (@ Ta=100°C)			mΑ
Typical Thermal Resistance (Note 1) R $\theta$ JA		°C /W		
Typical Junction Capacitance (Note 2)		pF		
Operating Temperature Range Tj		°C		
Storage Temperature Range TSTG		°C		

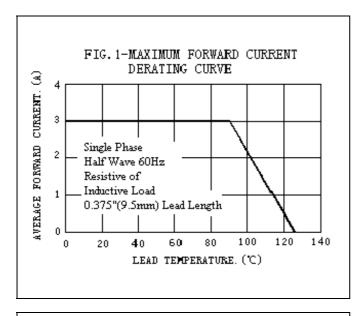
Note 1: Thermal resistance from junction to ambient vertical P.C. Board Mounting, 0.375"(9.5mm) lead length.

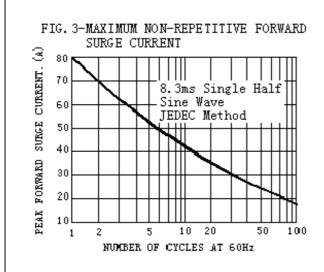
Note 2: Measured at 1Mhz and applied reverse voltage of 4V D.C.

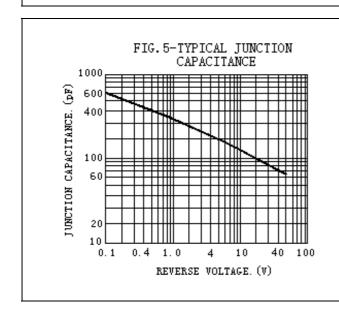
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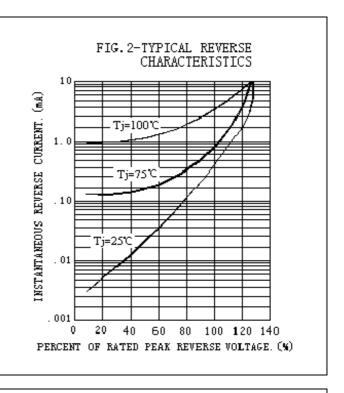
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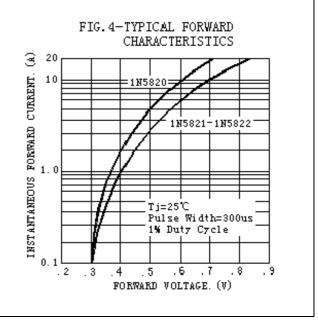
## **Characteristics Curve**







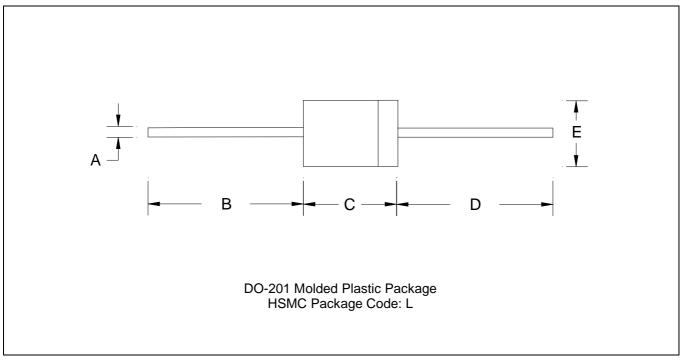




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## **DO-201 Dimension**



\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.	ואווט	Min.	Max.	Min.	Max.
Α	0.0472	0.0512	1.20	1.30	D	1.0000	-	25.40	-
В	1.0000	•	25.40	•	Е	0.1890	0.2087	4.80	5.30
С	0.2835	0.3740	7.20	9.50					

Notes: 1.Dimension and tolerance based on our Spec. dated May 28,1998.

- 2. Controlling dimension: millimeters.
- 3. Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
- 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

#### Material:

- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed.
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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