SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20 TO 40 VOLTS

CURRENT: 3.0 AMPERES

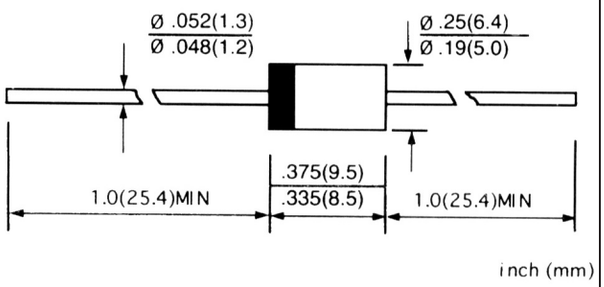
FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop, Low switching losses
- High surge capability
- For use in low voltage, high frequency inverters Free wheeling, and polarity protection applications
- The plastic material carries U/L recognition 94V-O

MECHANICAL DATA

Case: JEDEC DO-27, molded plastic
Terminals: Axial leads, solder able per MIL-STD-202, Method 208
Polarity: Color band denotes cathode
Weight: 0.041 ounce, 1.15 gram
Mounting position: Any

DO-27



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameters		1N5820	1N5821	1N5822	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current 9.5mm Lead Length, @ T_A=90℃	$I_{(AV)}$	3.0			A
Peak Forward Surge Current @T_j=75℃ 8.3ms Single half-sine-wave superimposed on rated load	I_{FSM}	80			A
Maximum Instantaneous Forward Voltage at 3.0A	V_F	0.475	0.500	0.525	V
at 9.4A(Note 1)		0.850	0.900	0.950	
Maximum Reverse Current @T_A=25℃	I_R	2.0			mA
at Rated DC Blocking Voltage @T_A=100℃		20			
Typical Junction Capacitance (Note 2)	C_j	250			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	20			℃/W
Operating Junction Temperature Range	T_j	-65---+125			℃
Storage Temperature Range	T_{STG}	-65---+150			℃

NOTE: 1.Pulse test: 300us pulse width, 1% duty cycle.
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Thermal Resistance Junction to Ambient.