1N5820 THRU 1N5822

PLASTIC SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE 20 to 40 Volts FORWARD CURRENT 3.0 Ampere

FEATURES

◆Low switching noise

◆Low forward voltage drop

◆High forward surge capability

◆High reliability

◆High temperature soldering guaranteed:

260℃/10 seconds,0.375 ” (9.5mm)lead lehngth at

5 lbs(2.3kg) tension

Mechanical Data

◆Case: Transfer molded plastic

◆Epoxy: UL94V-0 rate flame retardant

◆Polarity: Color band denotes cathode end

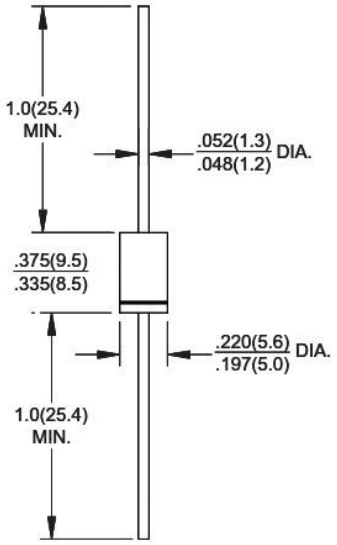
◆Lead: Plated axial lead, solderable per

MIL-STD-202E method 208℃

◆Mounting position: Any

◆Weight: 0.012ounce, 0.33 grams

DO-201AD(DO-27)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

	SYMBOL	1N5820	1N5821	1N5822	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current 0.375 ” (9.5mm) lead length at T_L=95℃	$I_{(AV)}$	3.0			Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	80			Amps
Maximum Instantaneous Forward Voltage at 3.0A	V_F	0.475	0.500	0.525	Volts
Maximum Instantaneous Forward Voltage at 9.4A		0.850	0.900	0.950	
Maximum DC Reverse Current T_A=25℃ at rated DC Blocking voltage T_A=100℃	I_R	2.0 20			mA
Typical Junction Capacitance (NOTE 1)	C_J	250			pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	28			℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +125			℃

Note: Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.3”×0.3”(8.0mm × 8.0mm) copper pad areas.

1N5820 THRU 1N5822

PLASTIC SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE 20 to 40 Volts FORWARD CURRENT 3.0 Ampere

RATING AND CHARACTERISTIC CURVES 1N5820 THRU 1N5822

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

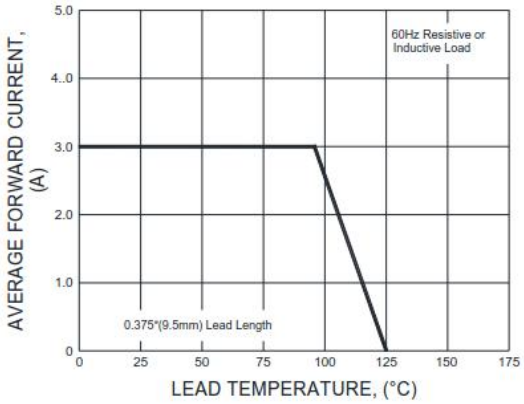


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

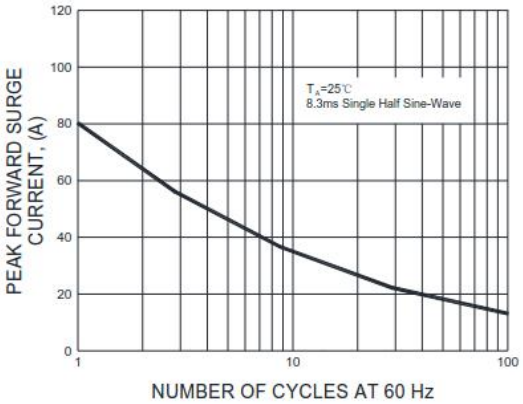


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

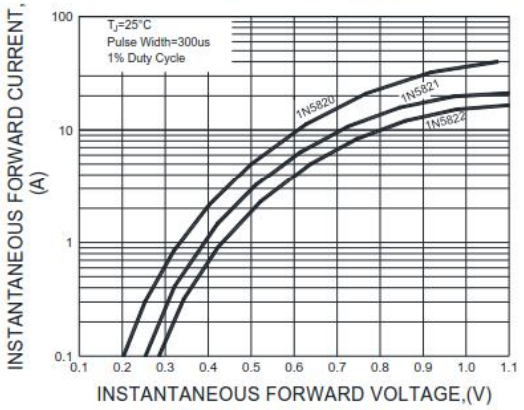


FIG.4-TYPICAL REVERSE CHARACTERISTICS

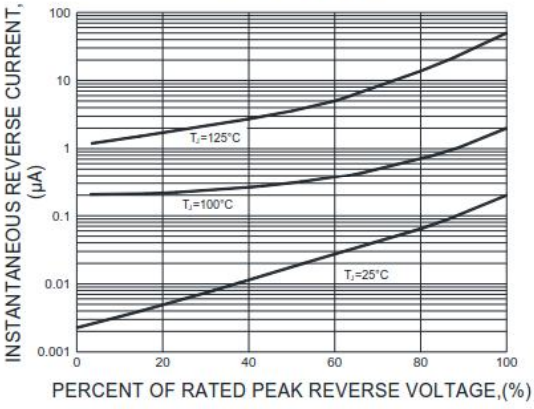
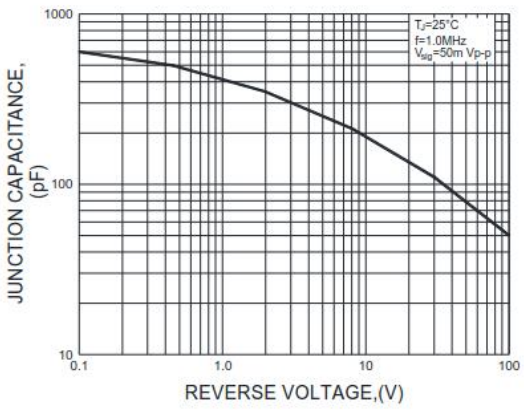


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.