



PINGWEI ENTERPRISE

1N5820 THRU 1N5822

3.0AMPS. SCHOTTKY BARRIER RECTIFIERS

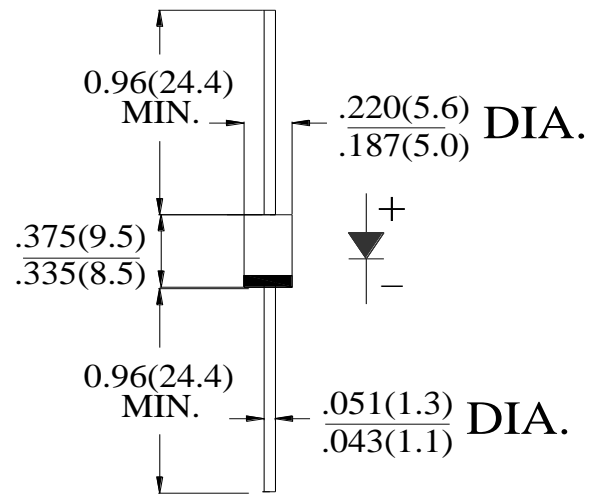
FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension

MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any

DO-27/DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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	SYM BOL	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 .375"(9.5mm) lead length at T _L =90°C	I_{F(AV)}	3.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80.0			A
Maximum Forward Voltage at 3.0A DC	V_F	0.45	0.55		V
Maximum DC Reverse Current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I_R	0.5 40.0			mA
Typical Junction Capacitance (Note 1)	C_J	250			pF
Typical Thermal Resistance (Note 2)	R_(JA)	40			°C /W
Storage Temperature	T_{STG}	-55 to +150			°C
Operation Junction Temperature	T_J	-55 to +125			°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C.Board Mounted.

RATING AND CHARACTERISTIC CURVES (1N5820 THRU 1N5822)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

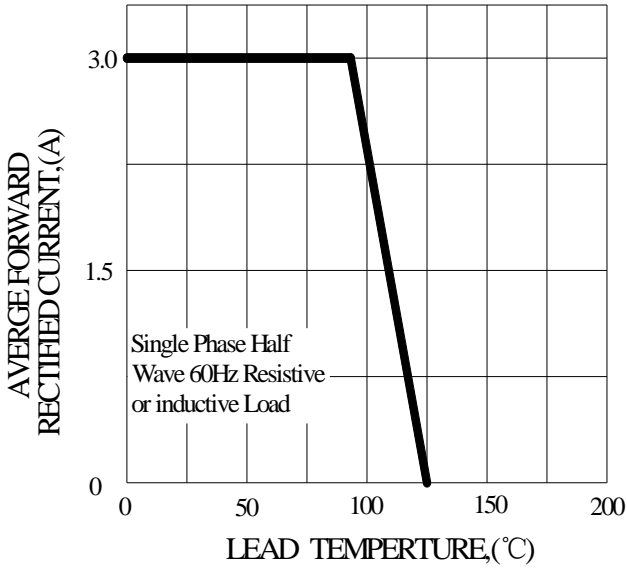


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

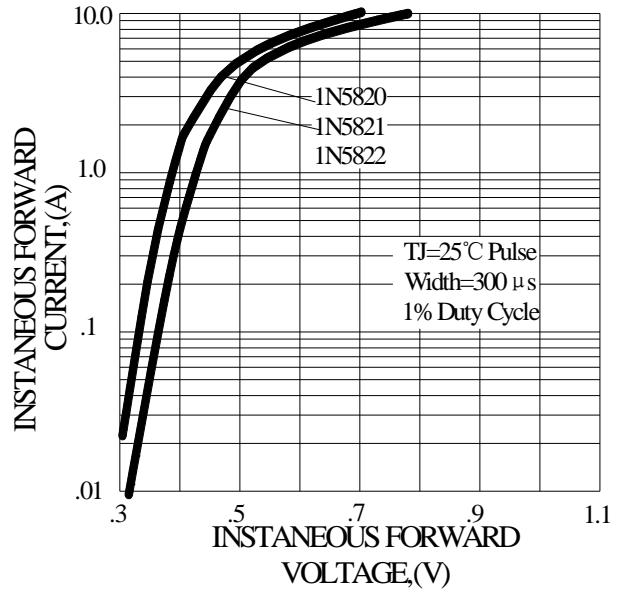


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

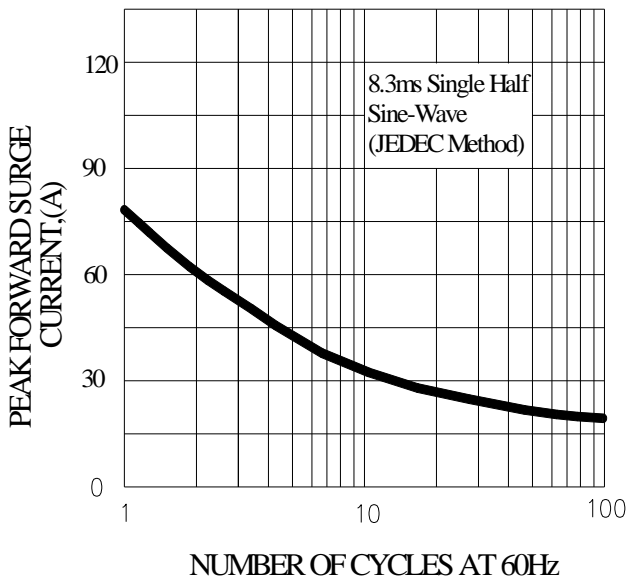


FIG.4-TYPICAL REVERSE CHARACTERISTICS

