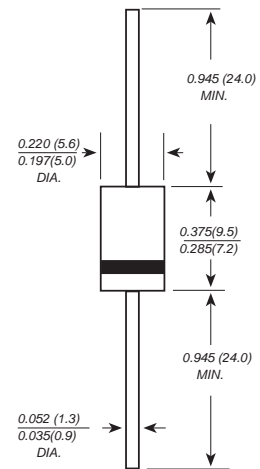


Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Guardring for overvoltage protection
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
260°C/10 seconds at terminals

Mechanical Data

- Case** : Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.0345 ounce, 0.98 grams



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 current derate by 20%.

Parameter	SYMBOLS	1N5820	1N5821	1N5822	UNITS
Maximum repetitive 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 at T _L =100°C	I _(AV)	3.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	70			A
Maximum instantaneous forward voltage at 3.0A	V _F	0.475	0.50	0.525	V
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.2 20			mA
Typical thermal resistance	R _{qJA}	45.0			°C/W
Operating junction temperature range	T _J	-55 to +150			°C
Storage temperature range	T _{STG}	-55 to +150			°C

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

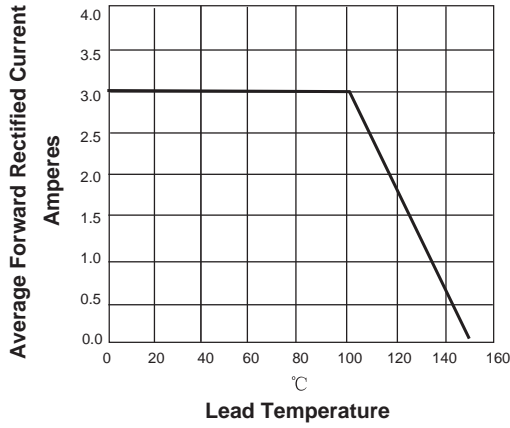


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

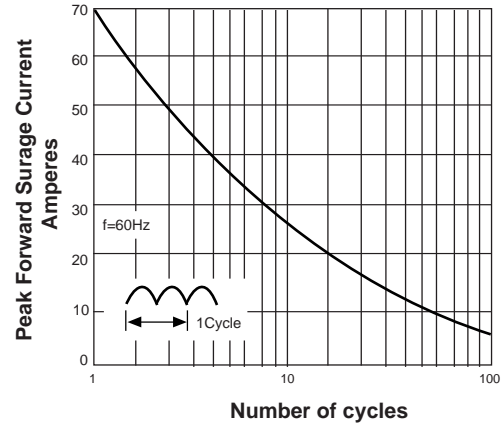


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

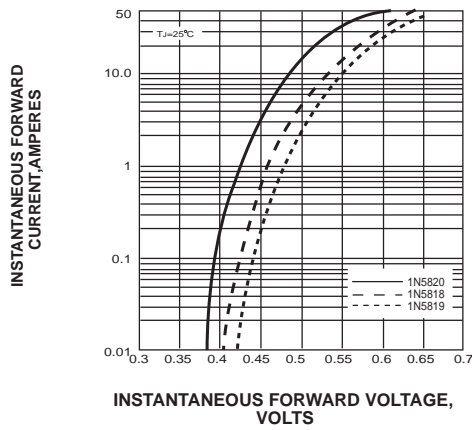
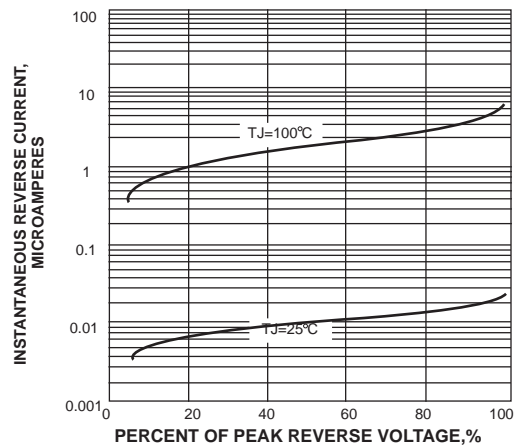
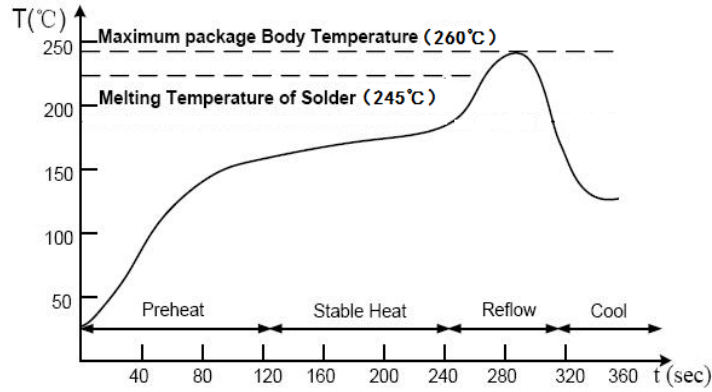


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Suggested Soldering Temperature Profile

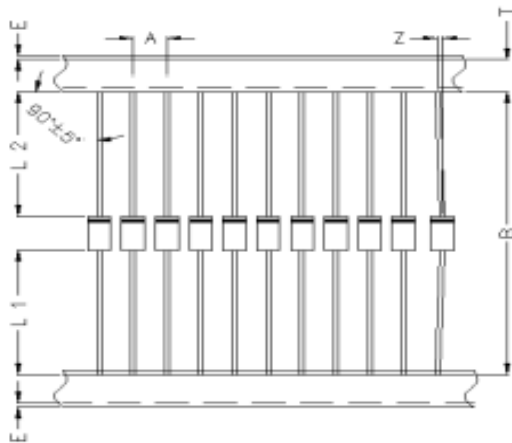


Note

- ◆ Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- ◆ The device can be exposed to a maximum temperature of 260°C for 10 seconds.
- ◆ Devices can be cleaned using standard industry methods and solvents.
- ◆ If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Package Information

Taping Specifications



Item	Symbol	Specifications(mm)
Component Pitch	A	10.0±0.5
Inner Tape Pitch	B	52.4±1.5
Component alignment	Z	1.2 Max
Tape width	T	6.0±0.5
Exposed adhesive	E	0.8 Max
Body eccentricity	L1-L2	1.0 Max

Ammunition Package Specifications

Package	Inner Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
DO - 27	255*150*75	1.25	420*276*312	12.5