

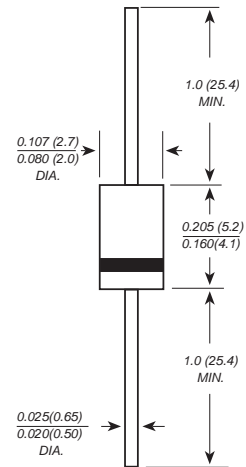
A-405

ROHS  
COMPLIANT

Pb  
Pb-Free

**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



Dimensions in inches and (millimeters)

**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** : 0.0088 ounce, 0.25 grams

**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	1N5817S	1N5818S	1N5819S	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	V
Maximum average forward rectified current at T <sub>L</sub> =100°C	I <sub(av)< sub=""></sub(av)<>	1.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30.0			A
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	0.45	0.55	0.60	V
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =100°C	I <sub>R</sub>	0.2 20			mA
Typical thermal resistance	R <sub>qJA</sub>	65.0			°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +125			°C
Storage temperature range	T <sub>STG</sub>	-55 to +150			°C

**Ratings And Characteristic Curves**

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

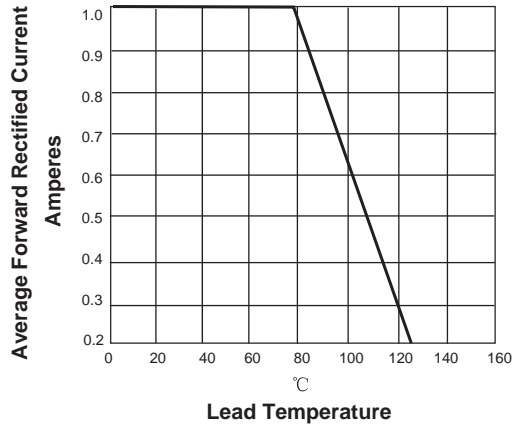


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

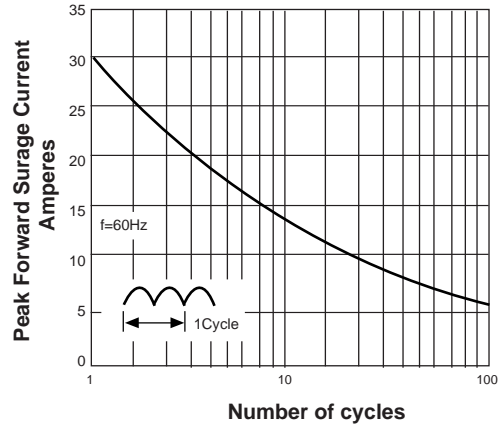


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

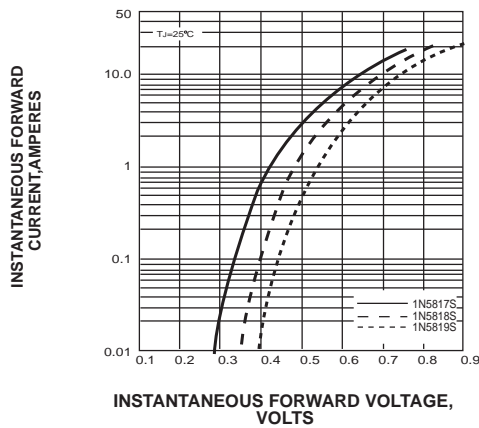
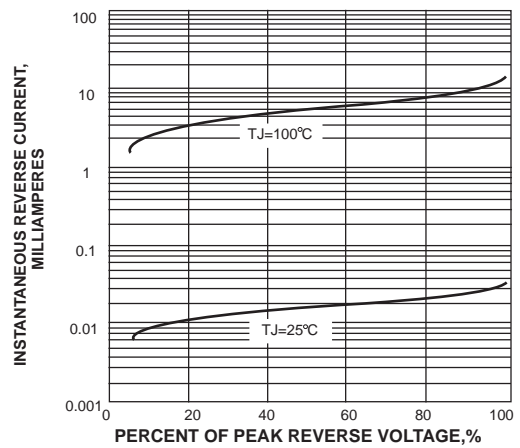
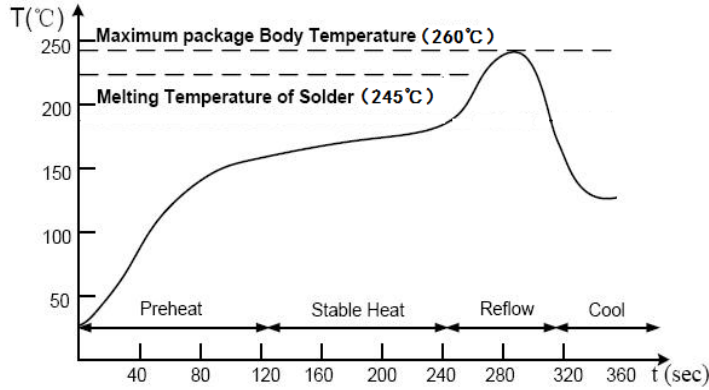


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



**Suggested Soldering Temperature Profile**

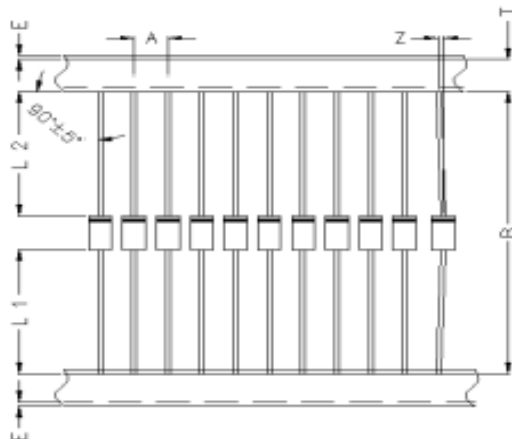


**Note**

- ◆ 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	5.0±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)
A -405	255*150*75	5	420*276*312	50