



PINGWEI ENTERPRISE

1N5817S THRU 1N5819S

1.0AMP. SCHOTTKY BARRIER RECTIFIERS

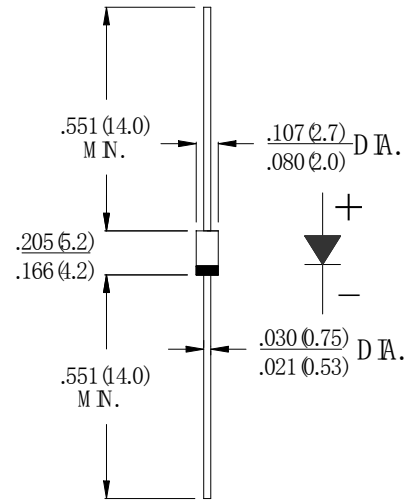
FEATURE

- . 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

A-405



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	SYMBOL	1N5817S	1N5818S	1N5819S	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 $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25.0			A
Maximum Forward Voltage at 1.0A DC	V_F	0.45	0.55		V
Maximum DC Reverse Current at rated DC blocking voltage	I_R	@ $T_A = 25^\circ\text{C}$	0.5		mA
		@ $T_A = 100^\circ\text{C}$	40.0		
Typical Junction Capacitance (Note 1)	C_J	110			pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	75			$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-55 to +150			$^\circ\text{C}$
Operation Junction Temperature	T_J	-55 to +125			$^\circ\text{C}$

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.