

1N5817AT THRU 1N5819AT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Forward current -1.0A

Reverse voltage-20 to 40V

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low power loss,high efficiency
- ◆ High current capability,low forward voltage drop
- ◆ High temperature soldering guaranteed:
260°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- ◆ Case: JEDEC DO-41 molded plastic body
- ◆ Terminals: Plated axial leads,solderable per MIL-STD-750,Method 2026
- ◆ Polarity: Color band denotes cathode end
- ◆ Weight: Approximated 0.33 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derating by 20 %

PARAMETER	SYMBOL	1N5817AT	1N5818AT	1N5819AT	UNIT
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 0.375"(9.5mm) lead length at $T_L=90^{\circ}C$	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current (Note1)	I_{FSM}	25			A
Maximum Forward Voltage at 1.0 A	V_F	0.450	0.550	0.600	V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^{\circ}C$ $T_A=100^{\circ}C$	I_R	0.5 10			mA
Typical Junction Capacitance (Note2)	C_J	110			pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	50			$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150			$^{\circ}C$

Dated: 0 /201
Rev:1.0

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- Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method) .
2. Measured at 1MHz and applied reverse voltage of 4.0 D.C.
3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

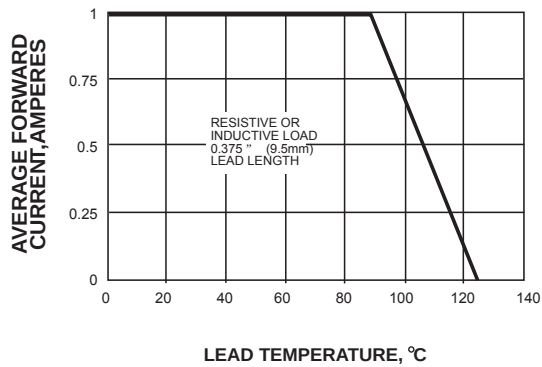


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

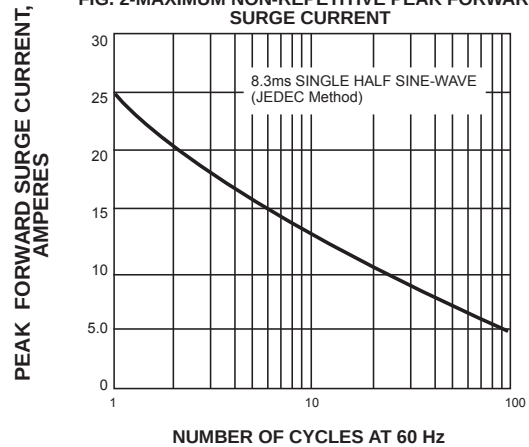


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

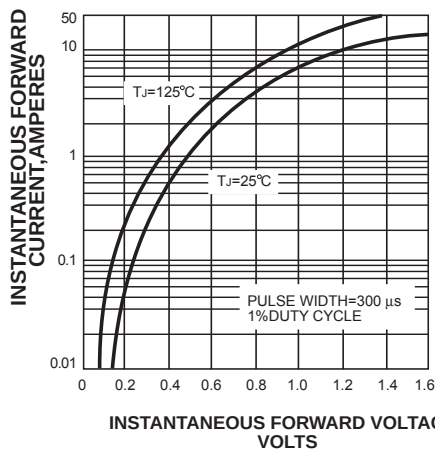


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

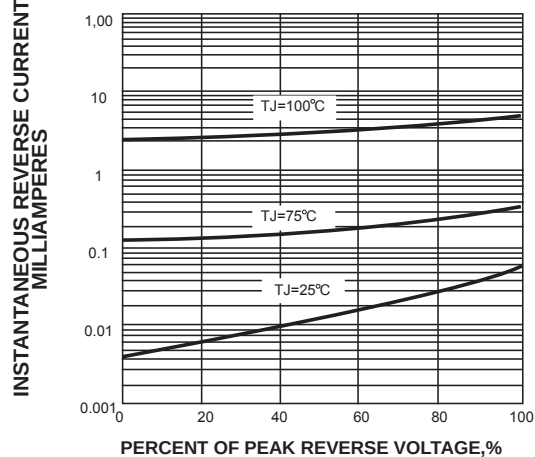


FIG. 5-TYPICAL JUNCTION CAPACITANCE

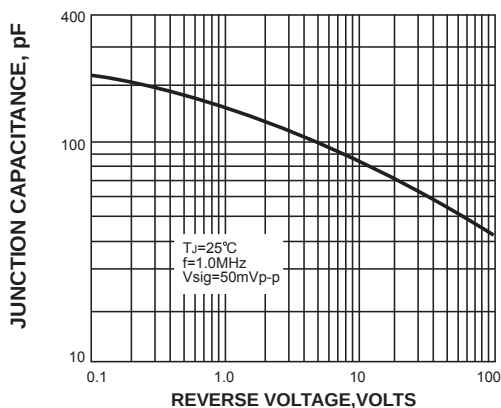
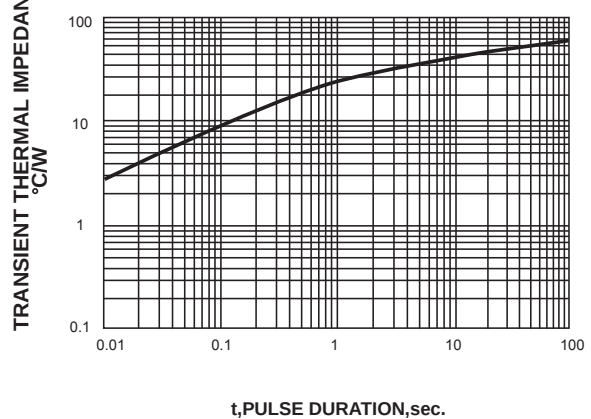


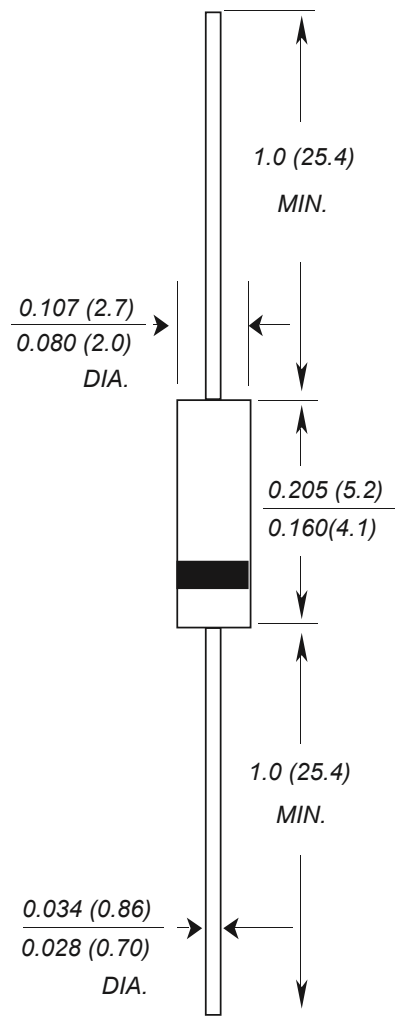
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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PACKAGE OUTLINE

DO-41



Dimensions in inches and (millimeters)

ORDERING INFORMATION

Device	Package	Shipping
1N5817AT thru 1N5819AT	DO-41	5,000/Tape & Reel (13 inches)