



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N5817W
THRU
1N5819W

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODES
VOLTAGE RANGE - 20 to 40 Volts CURRENT - 1.0 Ampere

FEATURES

- * For general purpose applications
- * Low turn-on voltage
- * Fast switching time
- * Ideal for surface mounted applications

MECHANICAL DATA

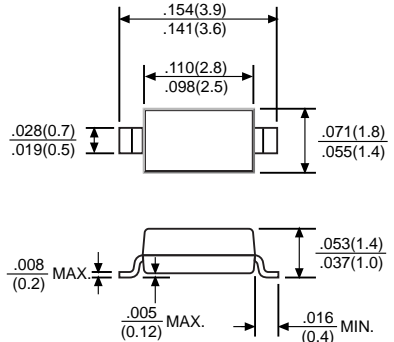
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026 guaranteed
- * Mounting position: Any
- * Weight: 0.008 grams Approx.

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%.



SOD-123



Dimensions in inches and (millimeters)

	SYMBOL	1N5817W	1N5819W	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	40	Volts
Maximum RMS Voltage	V _{RMS}	14	28	Volts
Maximum DC Blocking Voltage	V _{DC}	20	40	Volts
Maximum Average Forward Rectified Current at T _A =55°C	I _O	1.0		Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30		Amps
Maximum Instantaneous Forward Voltage at I _F =1.0A	V _F	0.45	0.60	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	1.0		mAmps
Typical Thermal Resistance (Note1)	R _{θJA}	325		°C/W
Typical Junction Capacitance (Note 2)	C _J	120		pF
Storage Operating Temperature Range	T _J , T _{STG}	-55 to +150		°C

Note: 1. Mounted on FR4 PC Board.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (1N5817W THRU 1N5819W)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

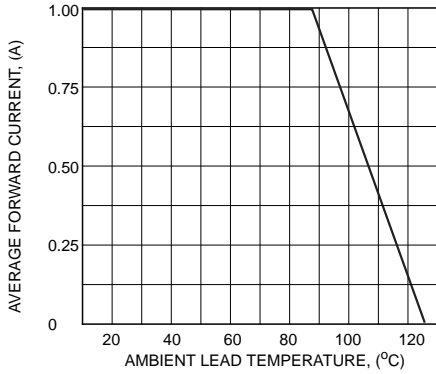


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

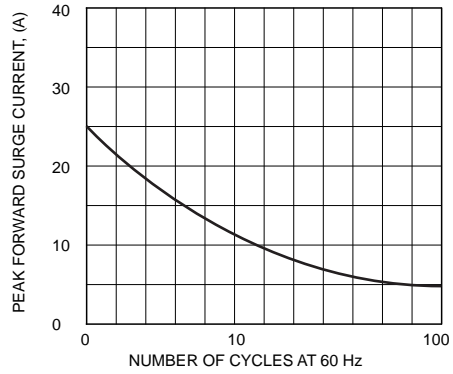


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

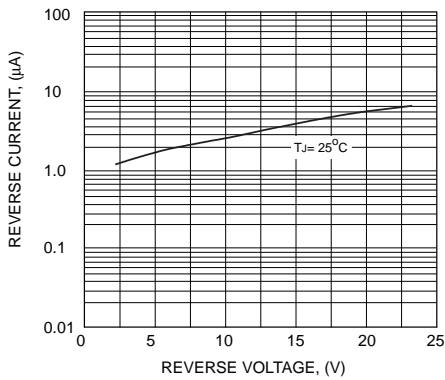


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

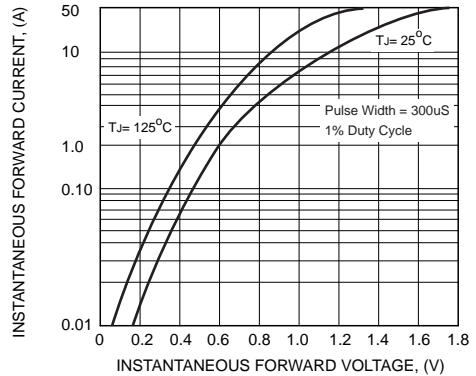
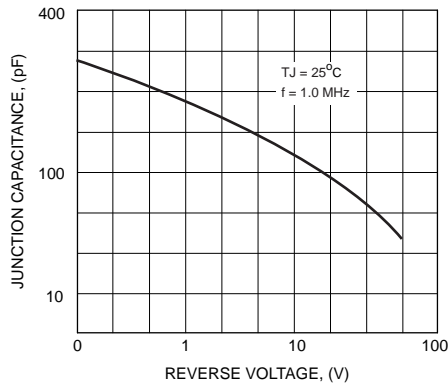


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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