DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N5817WS THRU 1N5819WS

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODES

VOLTAGE RANGE - 20 to 40 Volts *CURRENT - 1.0 Ampere*

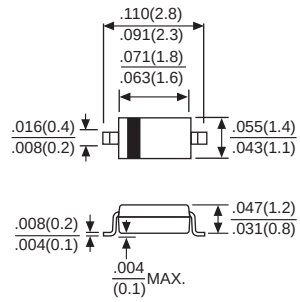
FEATURES

* 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.

SOD-323



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%.

	SYMBOL	1N5817WS	1N5818WS	1N5819WS	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at T_A=90°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	0.55	0.60	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	1.0			mAmps
Typical Thermal Resistance	$R\theta_{JA}$	426			°C/W
Typical Junction Capacitance	C_J	120			pF
Storage Operating Temperature Range	T_J, T_{STG}	-55 to +150			°C

RATING AND CHARACTERISTIC CURVES (1N5817WS THRU 1N5819WS)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

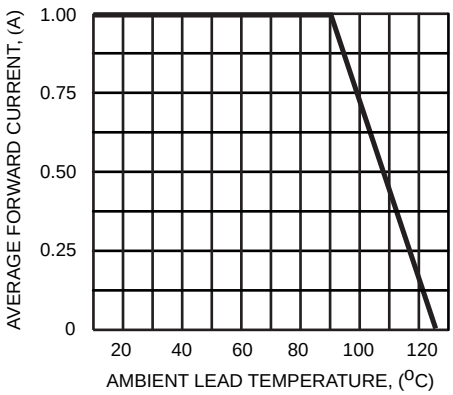


FIG. 2
MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

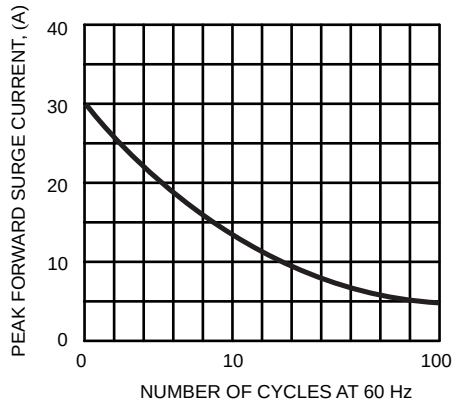


FIG. 3
TYPICAL REVERSE CHARACTERISTICS

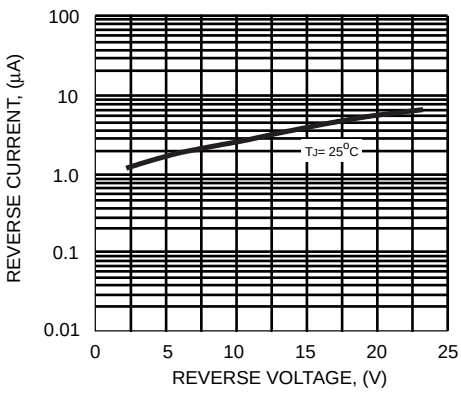


FIG. 4
TYPICAL INSTANTANEOUS FORWARD
CHARACTERSTICS

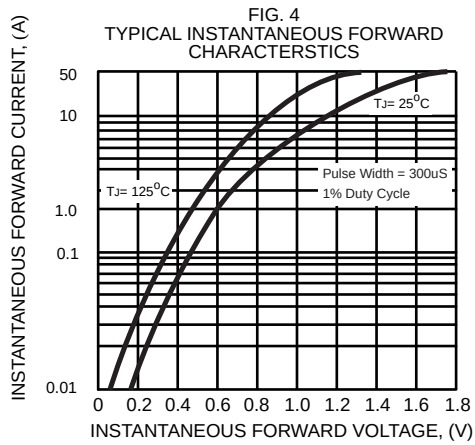


FIG. 5
TYPICAL JUNCTION CAPACITANCE