

1N5819

1.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.34 grams

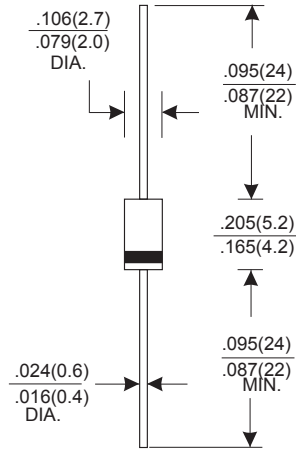
VOLTAGE RANGE

40 V olts

CURRENT

1.0 Ampere

DO-41



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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		1N5819		UNITS
Maximum Recurrent Peak Reverse Voltage		40		V
Maximum RMS Voltage		28		V
Maximum DC Blocking Voltage		40		V
Maximum Average Forward Rectified Current				
.375"(9.5mm) Lead Length at Ta=90°C		1.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		25		A
Maximum Instantaneous Forward Voltage at 1.0A		0.60		V
Maximum DC Reverse Current Ta=25°C		1.0		mA
at Rated DC Blocking Voltage Ta=100°C		10		mA
Typical Junction Capacitance (Note1)		110		pF
Typical Thermal Resistance RθJA (Note 2)		80		°C/W
Operating Temperature Range Tj		-65 — +125		°C
Storage Temperature Range Tstg		-65 — +150		°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (1N5819)

FIG.1-TYPICAL FORWARD
CHARACTERISTICS

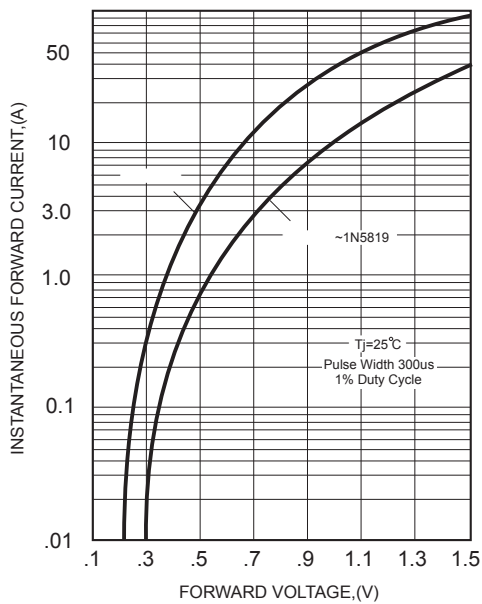


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

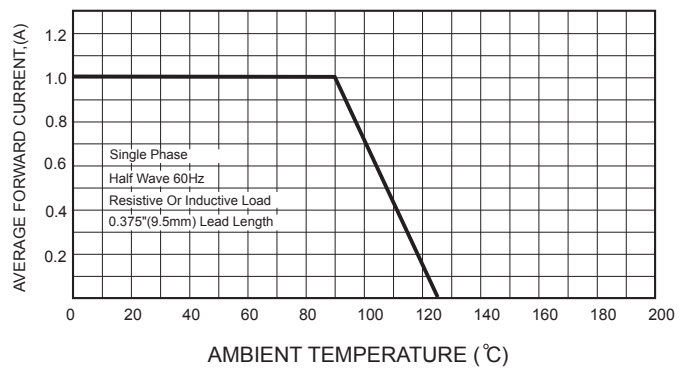


FIG.4-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

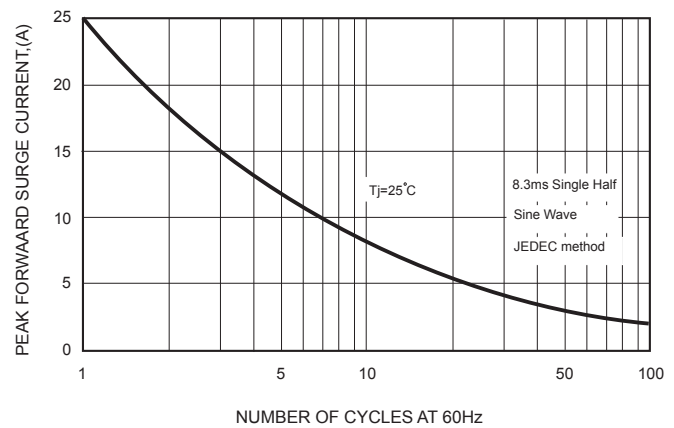


FIG.3 - TYPICAL REVERSE
CHARACTERISTICS

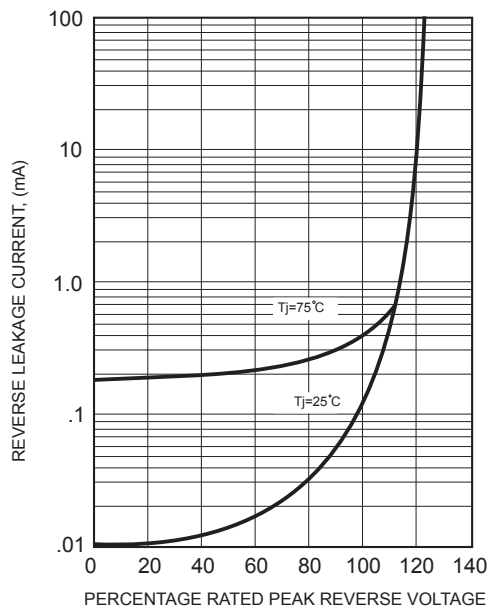


FIG.5-TYPICAL JUNCTION CAPACITANCE

