CAPAR CORP.

Schottky Barrier Rectifiers

1 A Series 1N5817-1N5819

Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, alcohol, Chlorothene and similar solvents
- The plastic material carriesU/L recognition 94V-O
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

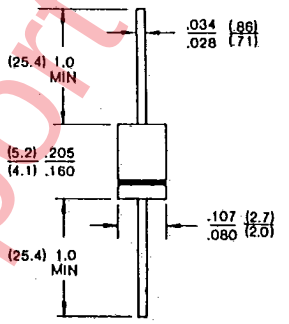
Voltage Range 20, 30, 40 Volts

Current 1.0 Amperes

Mechanical Data

Case: JEDEC DO-41, molded plastic
Terminals: Axial leads, solderable per MIL-STD-202, Method 208
Polarity: Color band denotes cathode
Mounting Position: Any
Weight: 0.012 ounces, .34 grams

DO-41



All 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%.

	1N5817	1N5818	1N5819	UNITS
*Maximum Recurrent Peak Reverse Voltage	20	30	40	V
Maximum RMS Voltage	14	21	28	V
Maximum DC Blocking Voltage	20	30	40	V
*Maximum Average Forward Rectified Current 3/8" Lead Length At T_L = 90° C	1.0			A
Peak Forward Surge Current 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method) T_L = 70° C	25			A
*Maximum Forward Voltage at 1.0A DC	.45	.55	.60	V
*Maximum Forward Voltage at 3.0A DC	.75	.875.	.90	V
*Maximum Average DC Reverse Current at Peak Reverse Voltage T_A = 25° C T_A = 100° C	1.0	10		mA mA
Typical Thermal Resistance (Note 1)	80			°C/W
Typical Junction Capacitance (note 2)	110			pF
*Operating Temperature Range	-65 to +125			°C
*Storage Temperature Range	-65 to +125			°C

NOTES: 1. Thermal Resistance Junction to Ambient Vertical PC Board Mounting, ½" Lead Length
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts
* JEDEC registered values

FIG. 1-FORWARD CURRENT DERATING CURVE

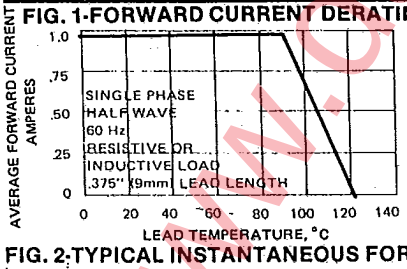
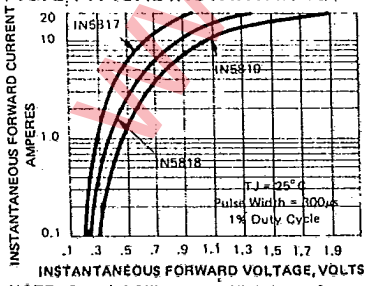


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



NOTE: Special Silicon Rectifiers are also available

FIG. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

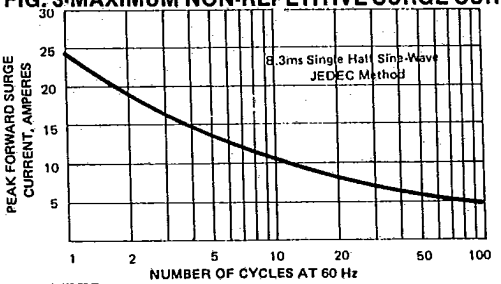


FIG. 4-TYPICAL JUNCTION CAPACITANCE