CAPAR CORP.

Schottky Barrier Rectifiers

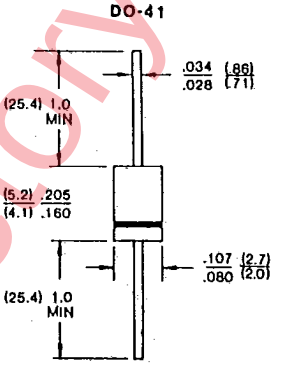
1 A Series 1N5817-1N5819

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



All dimensions in inches and (millimeters)

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

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

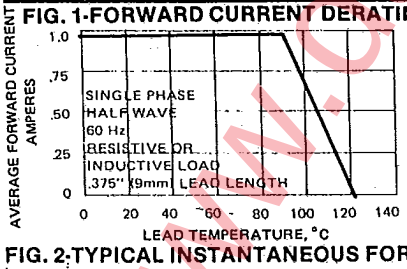
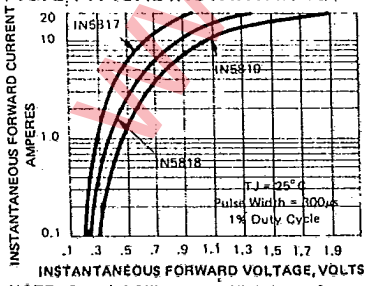


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



NOTE: Special Silicon Rectifiers are also available

FIG. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

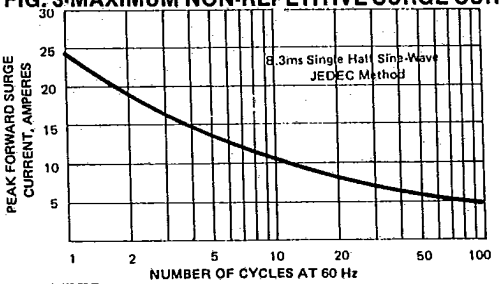


FIG. 4-TYPICAL JUNCTION CAPACITANCE