



1N5817 THRU 1N5819

1 A Schottky Barrier Rectifiers

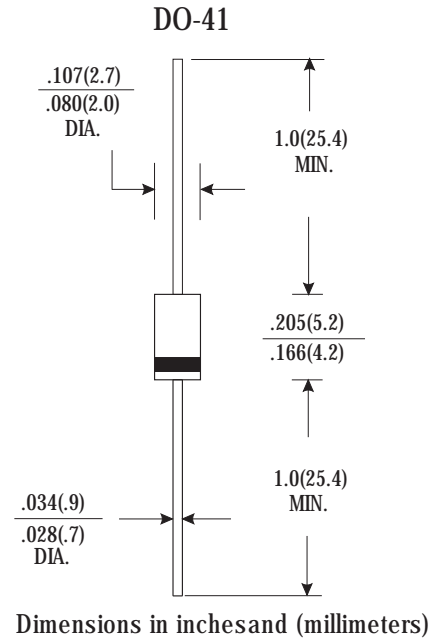
Voltage Range 20 to 100V
Current 1.0 Ampere

Features

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

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
- * High temperature soldering guaranteed:
250°C/10 seconds/.375"(9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- * Weight: 0.33 gram



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number	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 .375" (9.5mm) Lead Length @T _c =90°C	1.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sinewave -Superimposed on Rated Load(JEDEC method)	25			A
Maximum Instantaneous Forward Voltage@ 1.0A	0.45	0.550	0.600	V
Maximum Instantaneous Forward Voltage@ 3.0A	0.750	0.875	0.900	V
Maximum DC Reverse Current @ T _A =25°C	1.0			mA
At Rated DC Blocking Voltage @ T _A =100°C	10			mA
Typical Thermal Resistance (Note 1) R _{JA}	50			°C/W
Typical Junction Capacitance (Note 2)	110			pF
Operating Temperature Range T _J	-55 to+125			°C
Storage Temperature Range T _{STG}	-55 to+125			°C

Notes:

1. Thermal Resistance from Junction to Ambient PC Board Mounting, 0.375"(9.5mm) Lead Length.
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.



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RATINGS AND CHARACTERISTIC CURVES (1N5817 THRU 1N5819)

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

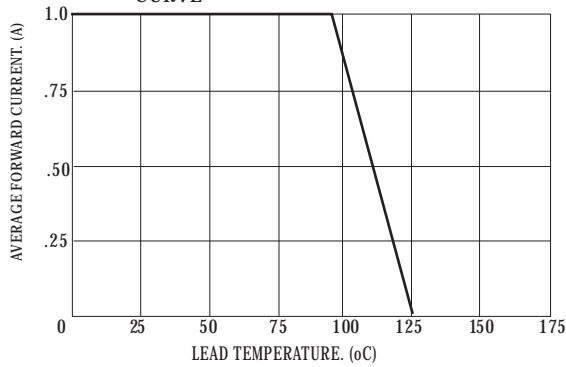


FIG.2-TYPICAL JUNCTION CAPACITANCE

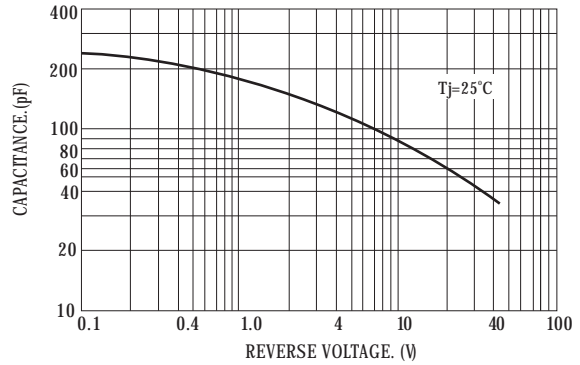


FIG.3-TYPICAL FORWARD CHARACTERISTICS

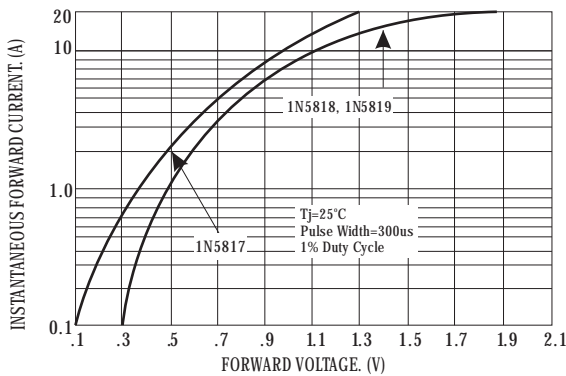


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

