1N5817 THRU 1N5819

1.0 AMP. Schottky Barrier Rectifiers



Voltage Range
20 to 40 Volts
Current
1.0 Ampere

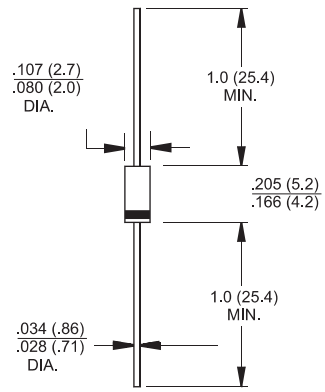
Features

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

Mechanical Data

- ✧ Cases: Molded plastic DO-41
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 0.33 gram

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	1N5817	1N5818	1N5819	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T_L = 90℃	$I_{(AV)}$	1.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	0.45	0.550	0.600	V
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	0.750	0.875	0.900	V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=100℃	I_R	1.0 10			mA mA
Typical Thermal Resistance (Note 1)	$R\theta_{JA}$ $R\theta_{JC}$	100 45			℃/W
Typical Junction Capacitance (Note 2)	Cj	55			pF
Operating Temperature Range	T_J	-65 to +125			℃
Storage Temperature Range	T_{STG}	-65 to +125			℃

Notes: 1. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

RATINGS AND CHARACTERISTIC CURVES (1N5817 THRU 1N5819)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

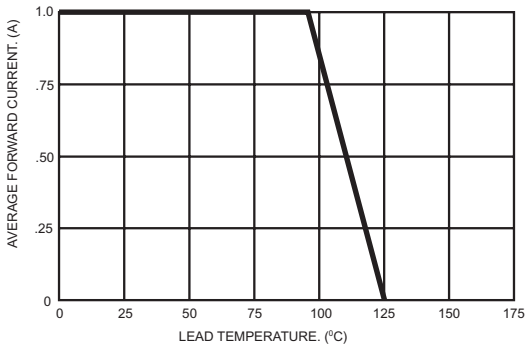


FIG.2- TYPICAL JUNCTION CAPACITANCE

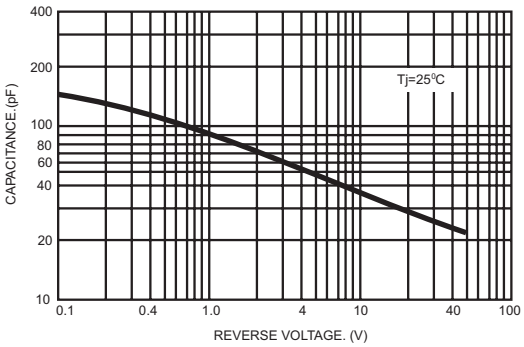


FIG.3- TYPICAL FORWARD CHARACTERISTICS

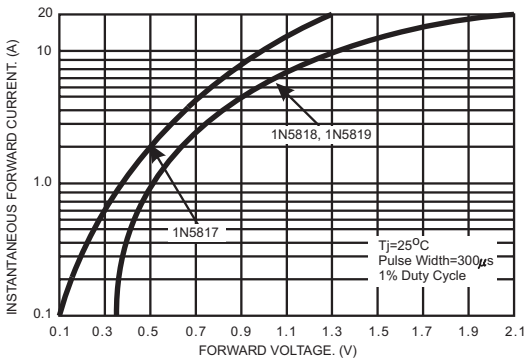


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

