1N5817 THRU 1N5819

Surface Mount Schottky Barrier Recitifiers

Reverse Voltage - 20 to 40 Volts

Forward Current - 1.0 Amperes

Features

- Low forward voltage drop
- High surge capability
- The plastic material carries UL recognition 94V-0

Mechanical Data

- Case: JEDEC DO-41 molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

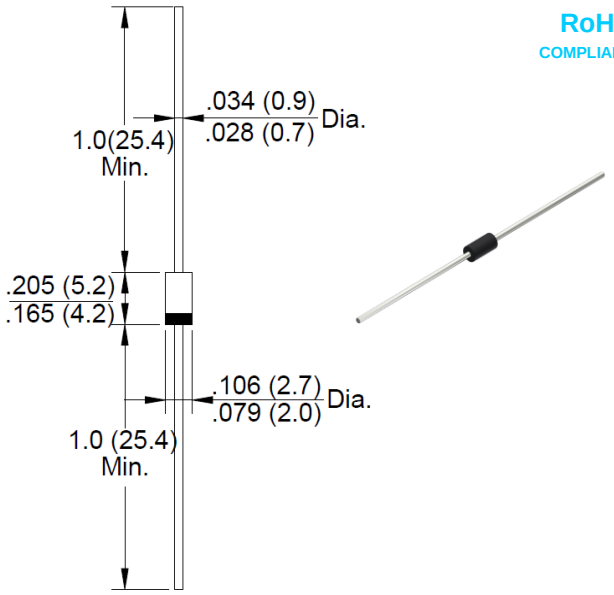
Note: Products with logo HY® or hy® are made by HY Electronic (Cayman) Limited.

Applications

- For use in low vlotage, high frequency inverters, polarity protection applications

DO-41

RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	1N5817	1N5818	1N5819	Unit
Maximum Repetitive 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 @ T_A=75 ℃	$I_{(AV)}$	1.0			A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25			A
Maximum Forward Voltage at 1.0A DC	V_F	0.45	0.55	0.6	V
Maximum Forward Voltage at 3.0A DC	V_F	0.75	0.875	0.9	V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	1.0 10			mA
Typical Junction Capacitance (Note1)	C_J	110			pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80			℃/W
Junction Temperature Range	T_J	-55 to +150			℃
Storage Temperature Range	T_{STG}	-55 to +150			℃

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. The typical data above is for reference only.

Fig. 1 - Forward Current Derating Curve

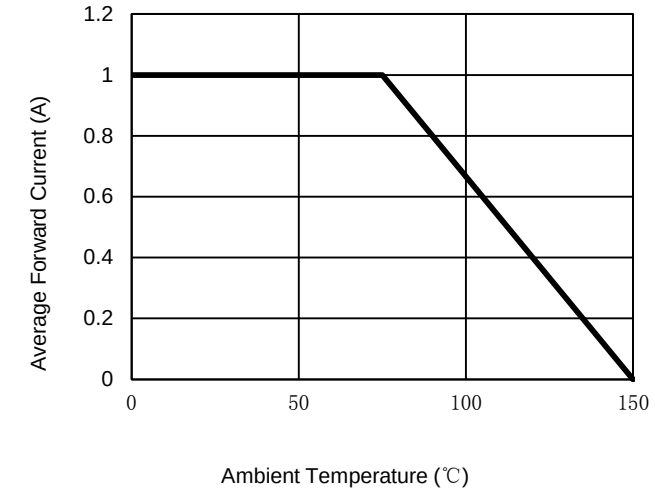


Fig. 2 - Maximum Non-Repetitive Surge Current

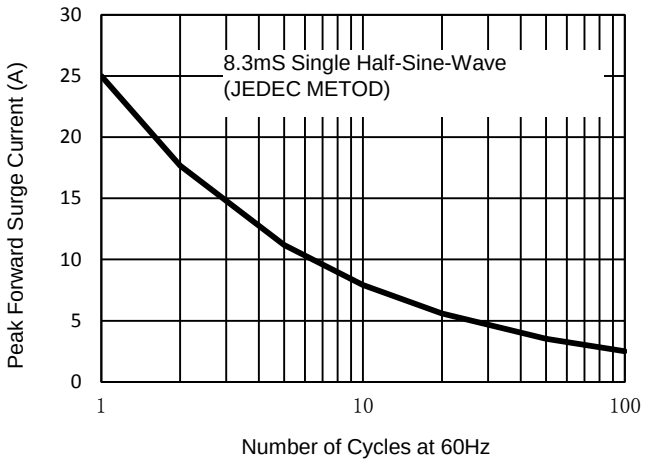


Fig. 3 - Typical Reverse Characteristics

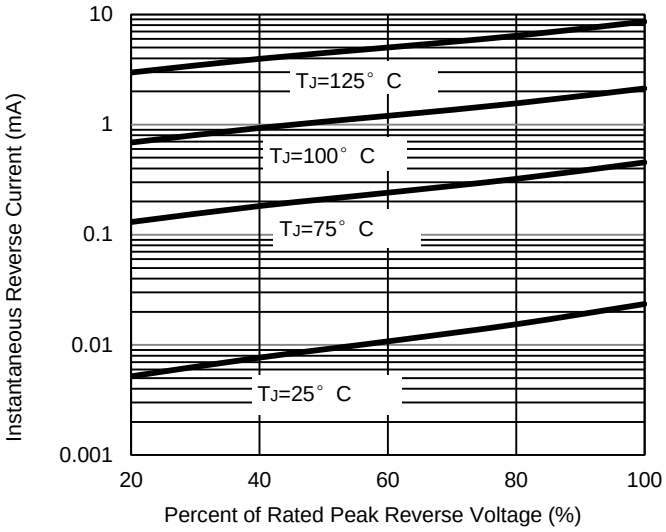


Fig. 4 - Typical Forward Characteristics

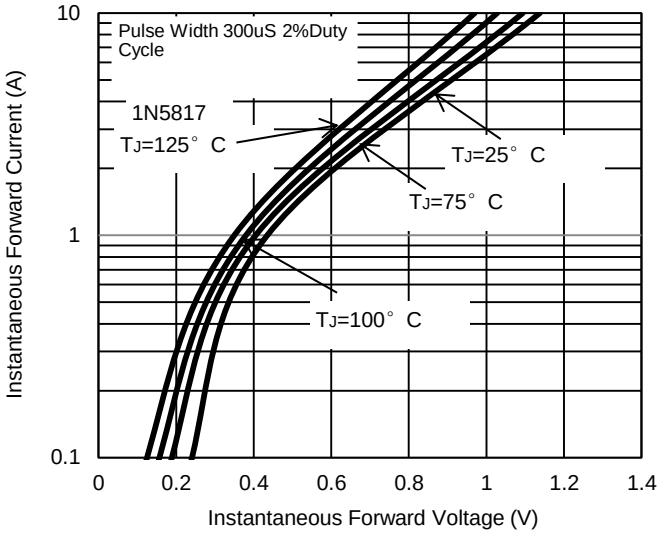


Fig. 5 - Typical Forward Characteristics

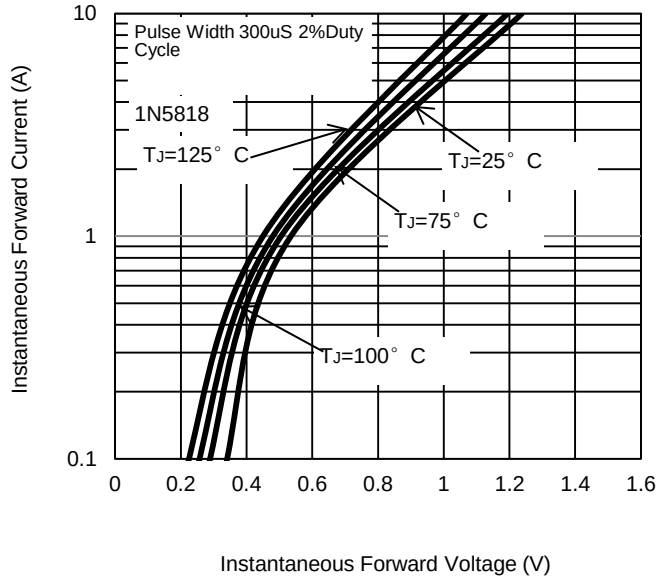
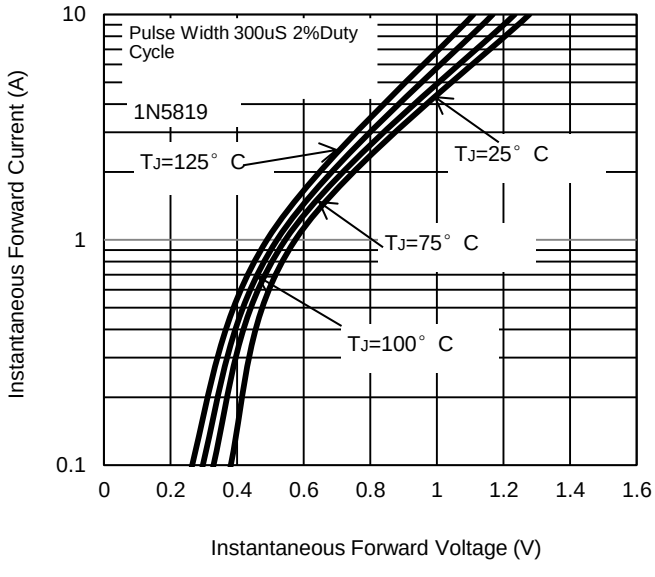


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.

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