



Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 40 Volts
Forward Current - 3.0 Amperes

Features

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

Mechanical Data

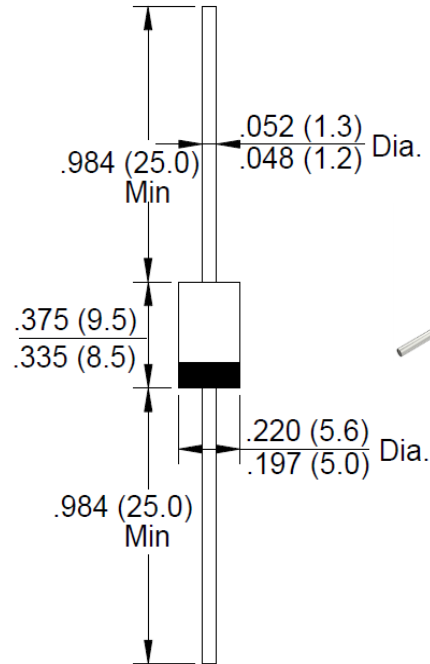
- Case: JEDEC DO-27 molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

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

Applications

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

DO-27



RoHS
COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Characteristics	Symbol	1N5820	1N5821	1N5822	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	20	30	40	V
Maximum RMS Voltage	VRMS	14	21	28	V
Maximum DC Blocking Voltage	VDC	20	30	40	V
Maximum Average Forward Rectified Current @ TL=95 °C	I(AV)	3.0			A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	80			A
Peak Forward Voltage at 3.0 A DC	VF	0.45	0.55	0.60	V
Peak Forward Voltage at 9.4 A DC	VF	0.850	0.900	0.950	V
Maximum DC Reverse Current @TJ=25°C	IR	1.0			mA
at Rated DC Blocking Voltage @TJ=100°C		20			
Typical Junction Capacitance (Note1)	CJ	250			pF
Typical Thermal Resistance Junction to Lead	RθJL	20			°C/W
Junction Temperature Range	TJ	-55 to +150			°C
Storage Temperature Range	TSTG	-55 to +150			°C

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

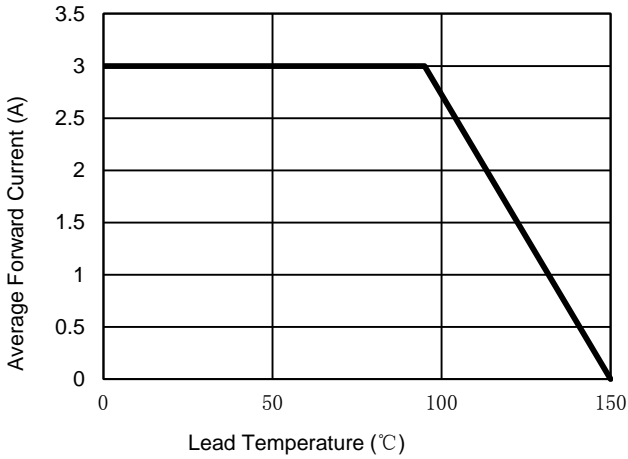


Fig. 2 - Maximum Non-Repetitive Surge Current

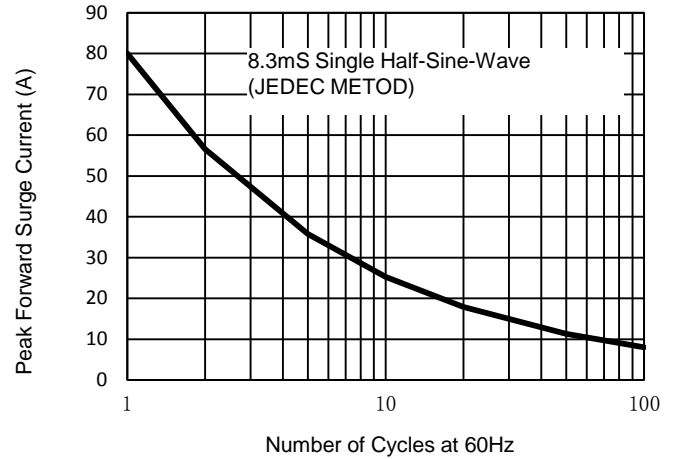


Fig. 3 - Typical Reverse Characteristics

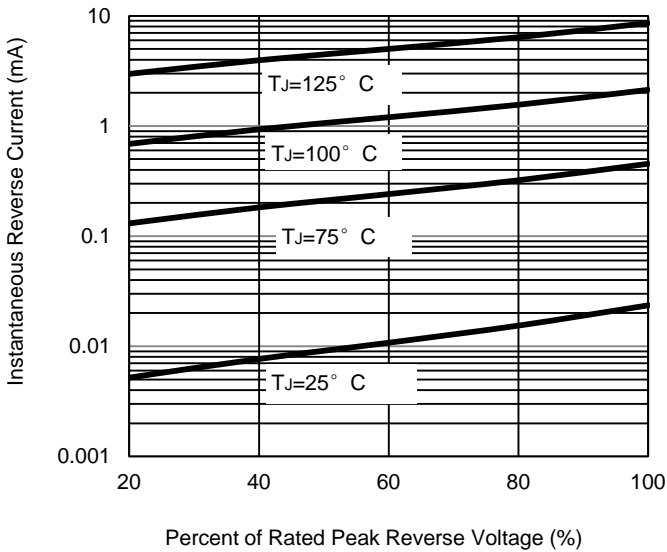


Fig. 4 - Typical Forward Characteristics

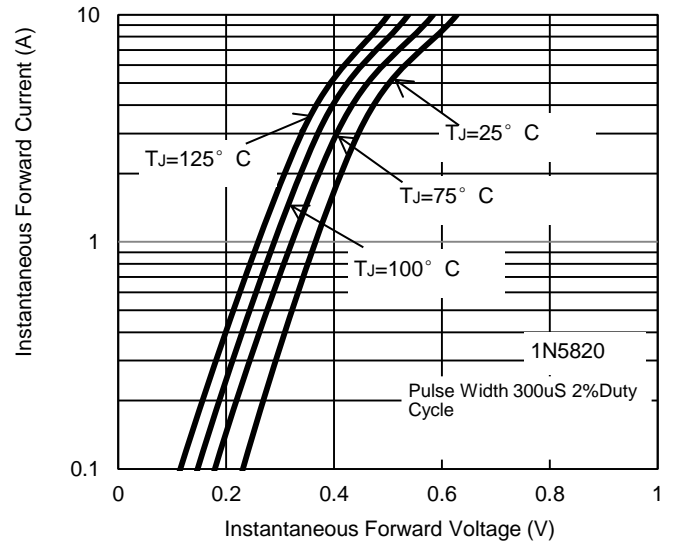


Fig. 5 - Typical Forward Characteristics

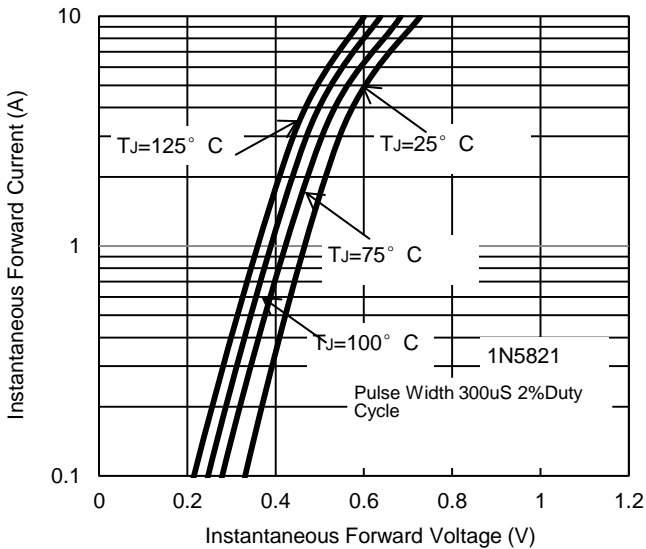
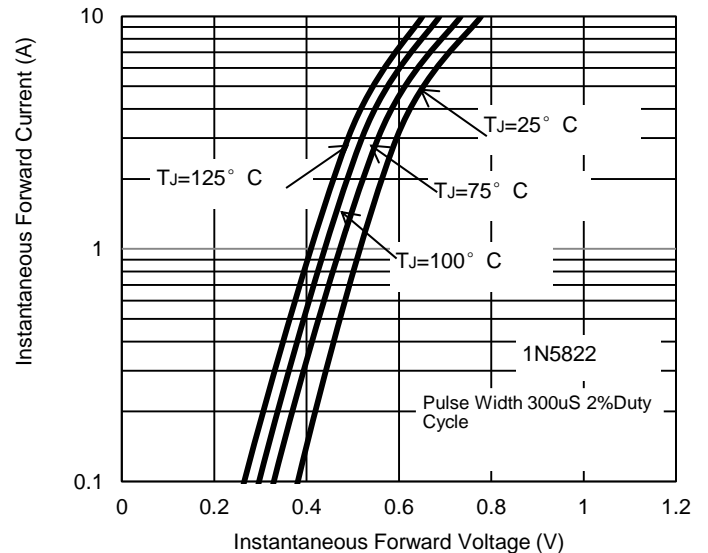


Fig. 6 - Typical Forward Characteristics





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