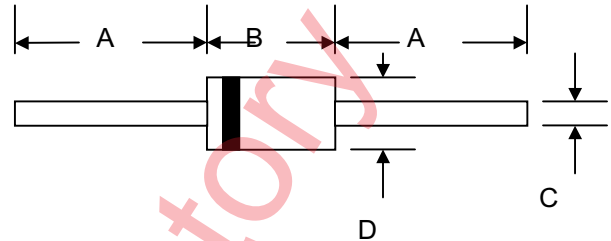


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**Features**

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



**Mechanical Data**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

DO-41				
Dim	Min	Max	Min	Max
A	25.40	—	1.000	—
B	8.50	9.50	0.334	0.374
C	1.20	1.30	0.047	0.051
D	5.00	5.60	0.197	0.220
	In mm		In inch	

**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	1N5817	1N5818	1N5819	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>				
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	30	40	V
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	V
Average Rectified Output Current (Note 1)	I <sub>O</sub>	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	25			A
Forward Voltage	V <sub>FM</sub>	0.450 0.750	0.550 0.875	0.60 0.90	V
Peak Reverse Current	I <sub>RM</sub>	1.0 10			mA
At Rated DC Blocking Voltage					
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	110			pF
Typical Thermal Resistance Junction to Lead (Note 1)	R <sub>θJL</sub>	60			K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150			°C

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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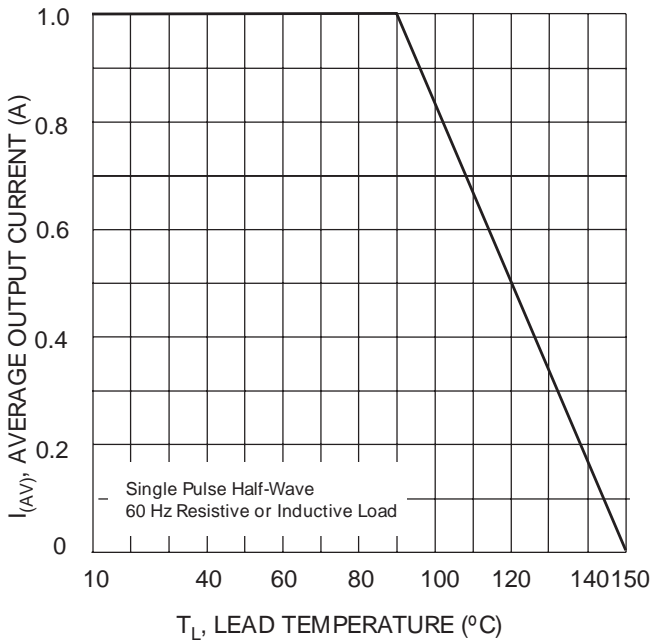


Fig. 1 Forward Current Derating Curve

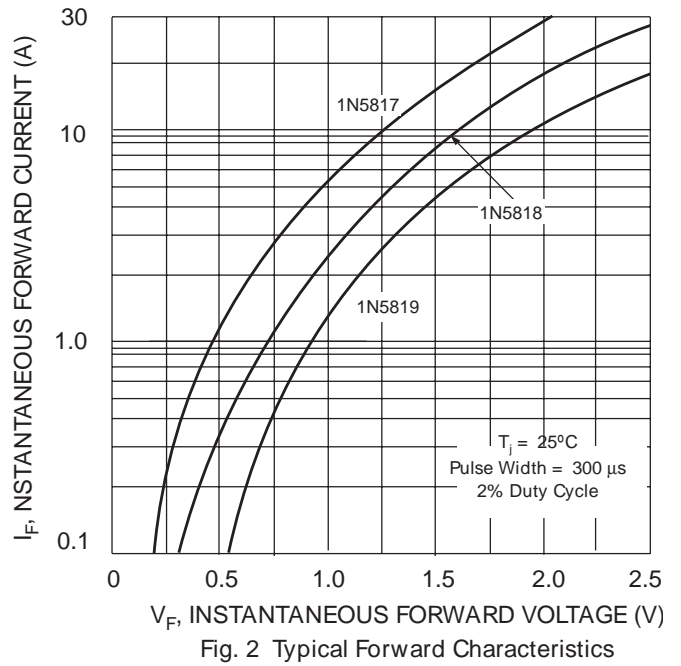


Fig. 2 Typical Forward Characteristics

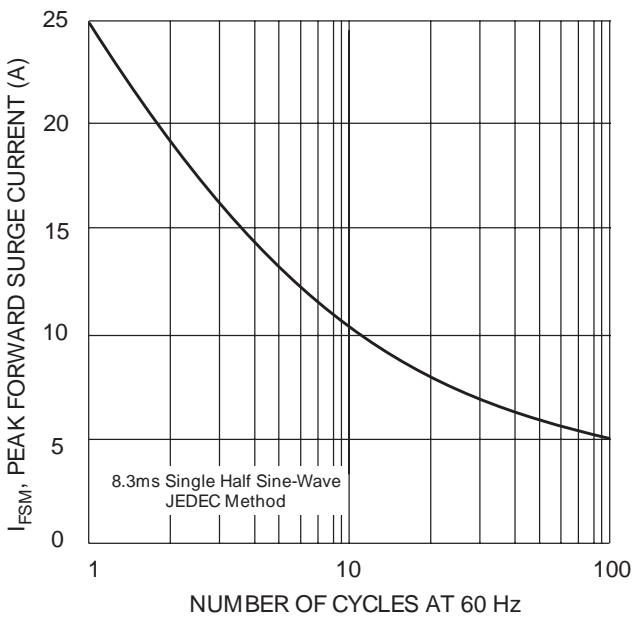


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

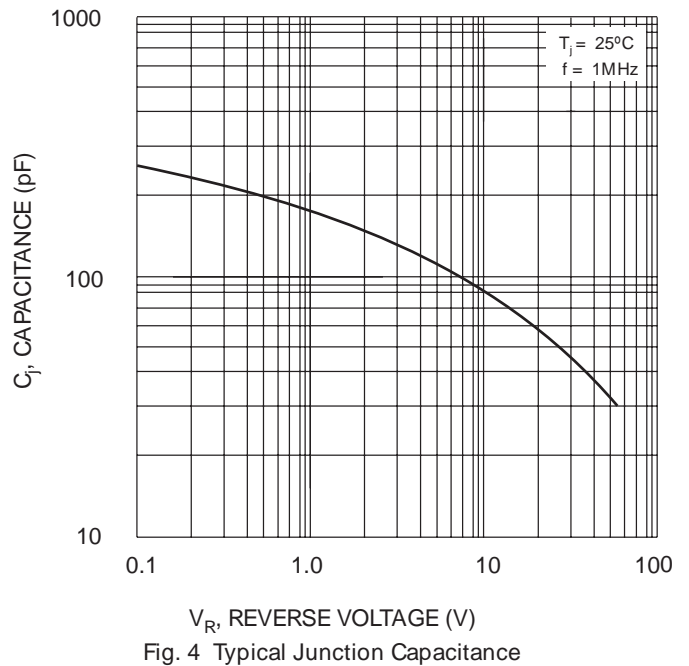


Fig. 4 Typical Junction Capacitance

**TECHNICAL DATA**

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