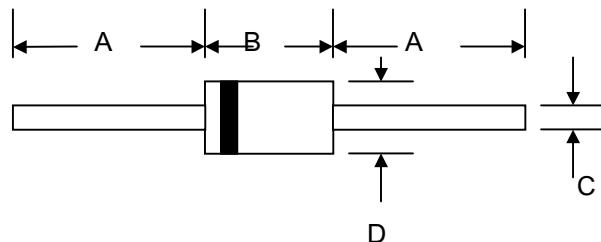


SENSITRON**SEMICONDUCTOR****1N5817-G-1N5819-G****1.0A SCHOTTKY BARRIER RECTIFIER**

Data Sheet 3343, Rev.-

Green Products**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
- Green Products in Compliance with the RoHS Directive

**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_A=25°C unless otherwise specified

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

Characteristic	Symbol	1N5817-G	1N5818-G	1N5819-G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	30	40	V
RMS Reverse Voltage	V _R (RMS)	14	21	28	V
Average Rectified Output Current (Note 1) @T _L = 90°C	I _O		1.0		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}		25		A
Forward Voltage @I _F = 1.0A @I _F = 3.0A	V _{FM}	0.450 0.750	0.550 0.875	0.60 0.90	V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}		1.0 10		mA
Typical Junction Capacitance (Note 2)	C _j		110		pF
Typical Thermal Resistance Junction to Lead (Note 1)	R _{θ JL}		60		K/W
Operating and Storage Temperature Range	T _j , T _{STG}		-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.

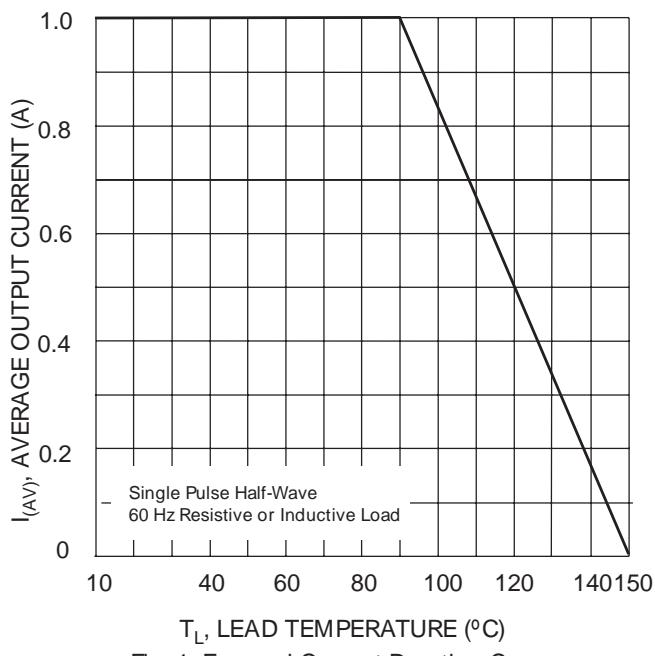


Fig. 1 Forward Current Derating Curve

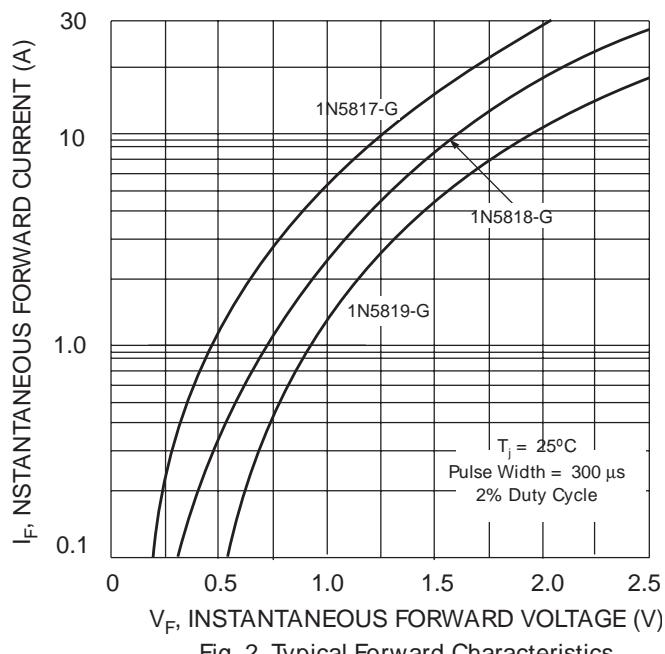


Fig. 2 Typical Forward Characteristics

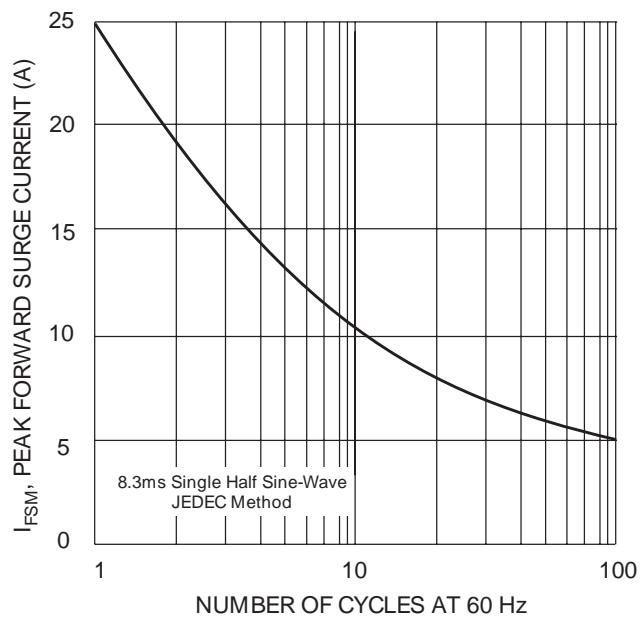


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

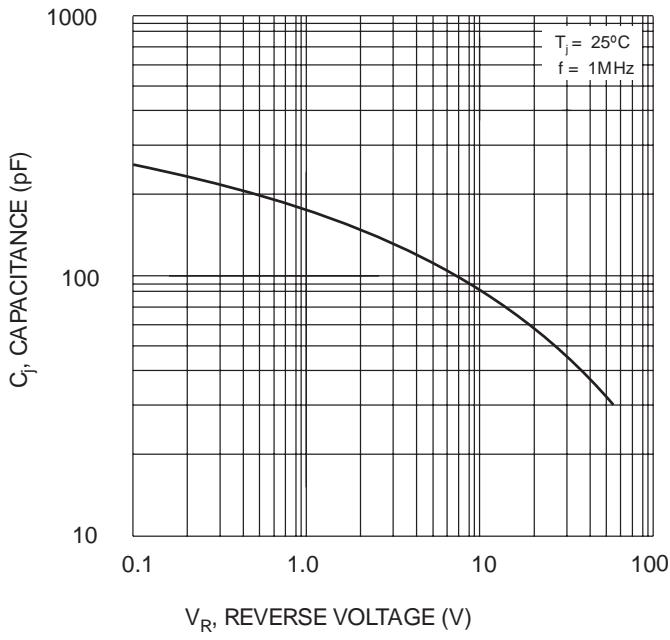


Fig. 4 Typical Junction Capacitance

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Green Products

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