

1N5817-G Thru. 1N5819-G

Reverse Voltage: 20 to 40 V

Forward Current: 1.0 A

RoHS Device



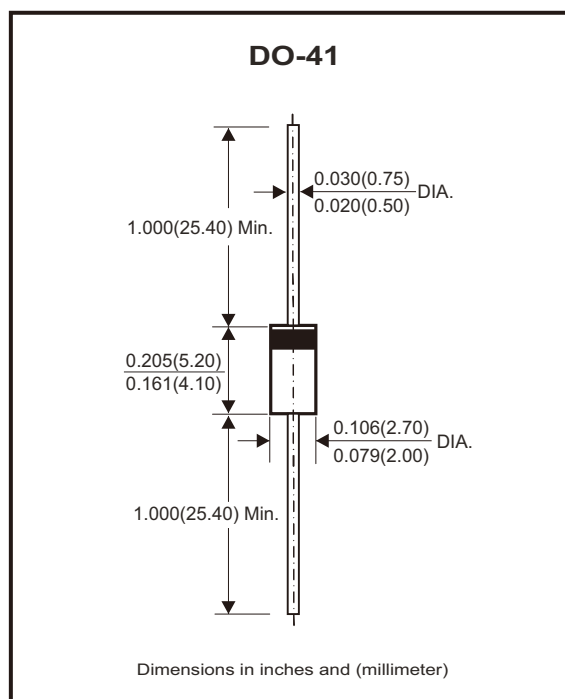
Features

- Metal-Semiconductor junction with guard ring.
- Epitaxial construction.
- Low forward voltage drop.
- High current capability.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

Mechanical data

- Case: JEDEC DO-41 molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Polarity: Color band denotes cathode.
- Mounting position: Any.

Circuit Diagram



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%.

Parameter		Symbol	1N5817-G	1N5818-G	1N5819-G	Unit
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 @T _A =75°C		$I_{F(AV)}$	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	0.450	0.550	0.600	V
Maximum forward voltage at 3.0A DC		V_F	0.750	0.875	0.900	V
Maximum DC reverse current at rated DC blocking voltage	@T _J =25°C	I_R	1.0			mA
	@T _J =100°C		10			
Typical junction capacitance (Note 1)		C_J	110			pF
Typical thermal resistance (Note 2)		$R_{\theta JA}$	80			°C/W
Operating temperature range		T_J	-55 to +150			°C
Storage temperature range		T_{STG}	-55 to +150			°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to ambient.

REV:C

Rating and Characteristic Curves (1N5817-G Thru.1N5819-G)

Fig.1 - Forward Current Derating Curve

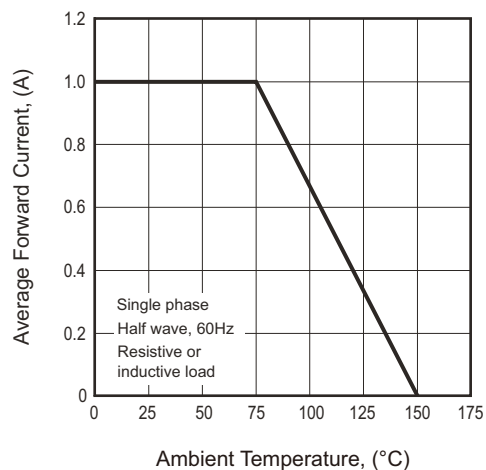


Fig.2 - Maximum Non-Repetitive Surge Current

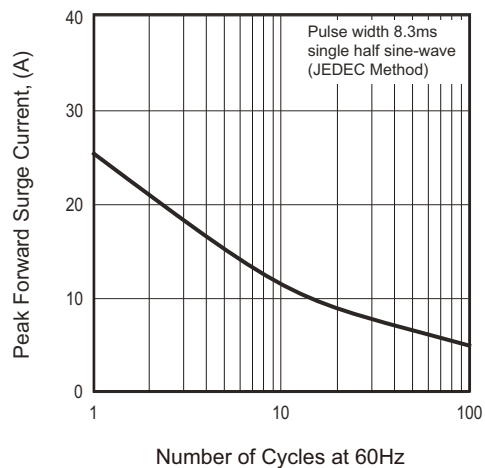


Fig.3 - Typical Junction Capacitance

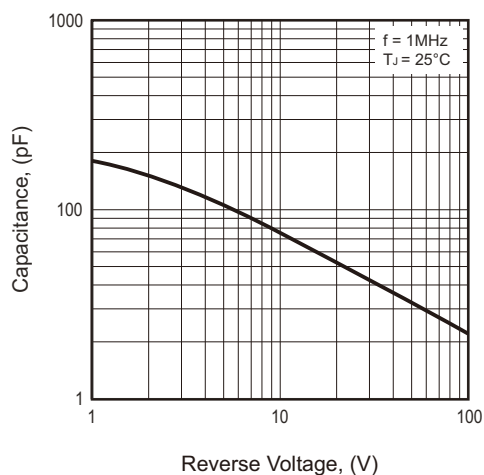
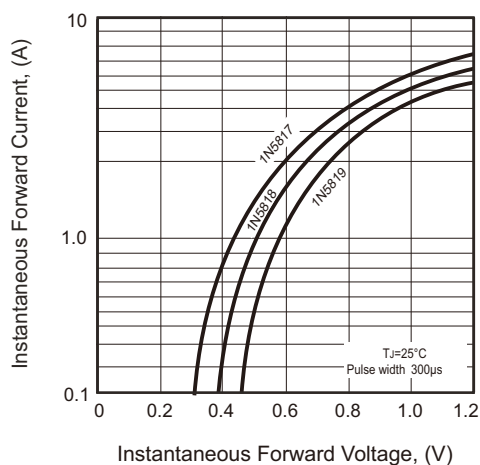


Fig.4 - Typical Forward Characteristics



Marking Code

Part Number	Marking code
1N5817-G	1N5817
1N5818-G	1N5818
1N5819-G	1N5819



XX = Product type marking code

Standard Packaging

Case Type	AMMO PACK
	BOX (pcs)
DO-41	5,000

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