

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	1N5818	1N5819	Unit
Peak Repetitive Reverse Voltage	V _{RRM}				
Working Peak Reverse Voltage	V _{RWM}	20	30	40	V
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	V
Average Rectified Output Current (Note 4) @ 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	I _{FSM}	25			A
Forward Voltage (Note 5) @ 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 Leakage Current at Rated DC Blocking Voltage (Note 5) @ T _A = +25°C @ T _A = +100°C	I _{RM}	1.0 10			mA
Typical Total Capacitance (Note 6)	C _T	110			pF
Typical Thermal Resistance Junction to Lead (Note 7)	R _{θJL}	15			°C/W
Typical Thermal Resistance Junction to Ambient	R _{θJA}	50			
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +125			°C

Notes: 4. Measured at ambient temperature at a distance of 9.5mm from the case.

5. Short duration test pulse used to minimize self-heating effect.

6. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

7. Thermal resistance from junction to lead vertical P.C.B. mounted, 0.375" (9.5mm) lead length with 1.5 x 1.5" (38 x 38mm) copper pads.

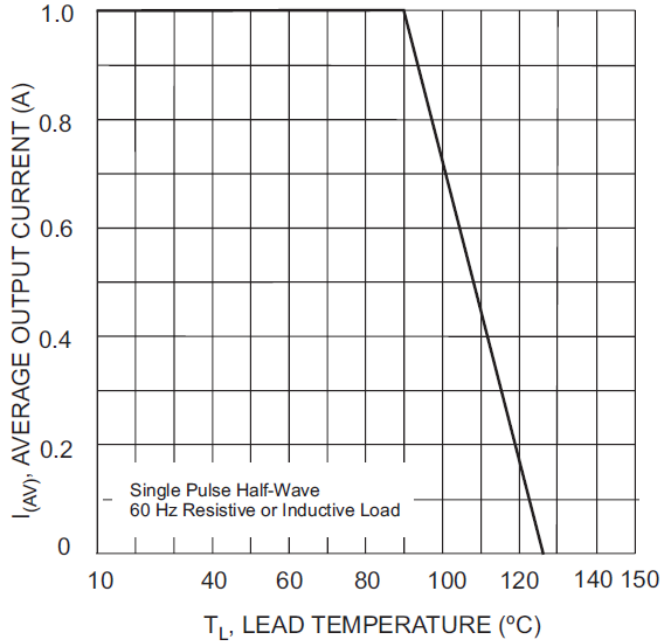


Fig. 1 Forward Current Derating Curve

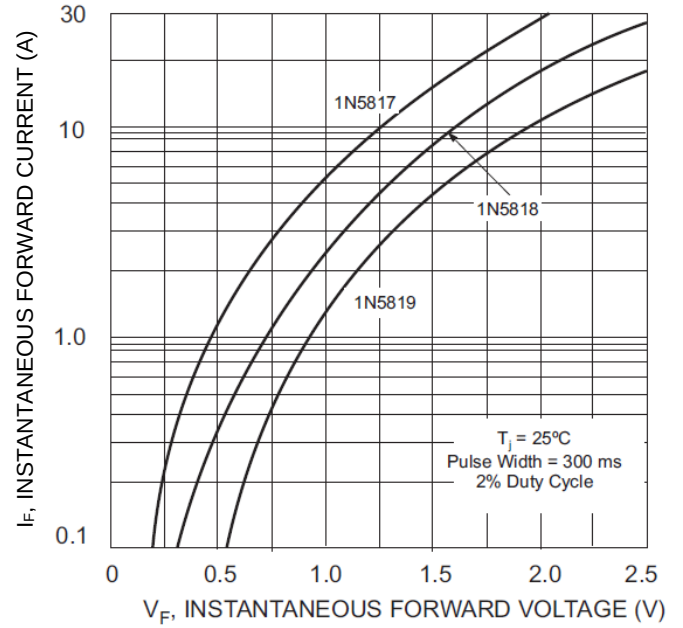


Fig. 2 Typical Forward Characteristics

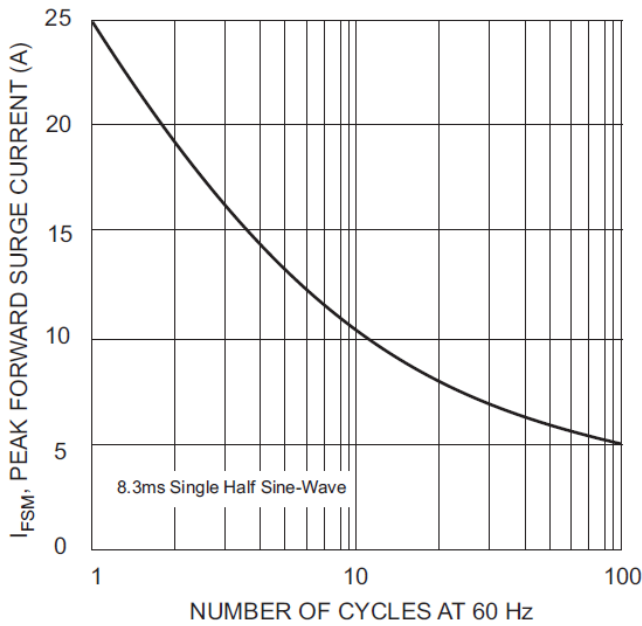


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

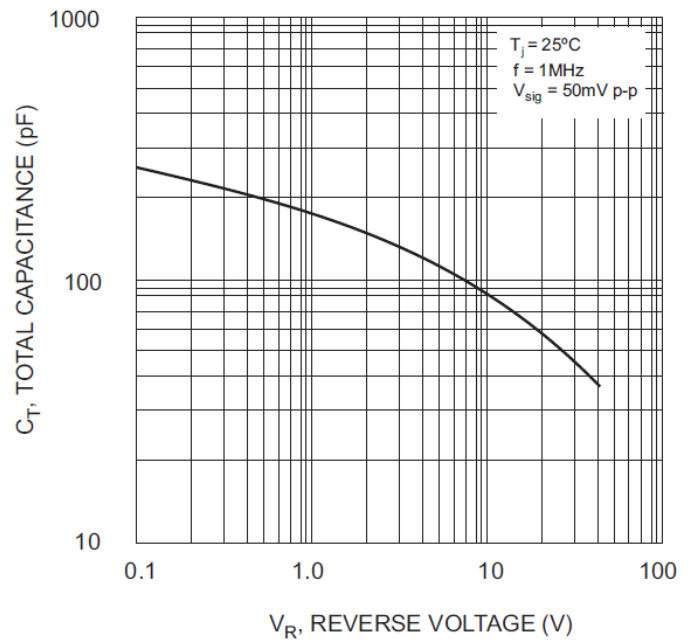
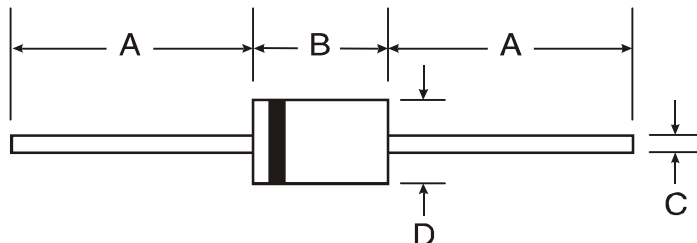


Fig. 4 Typical Total Capacitance

Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

DO-41 (Plastic)



DO-41 (Plastic)		
Dim	Min	Max
A	25.40	-
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

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