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 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 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 @ T_A = +25°C at Rated DC Blocking Voltage (Note 5) @ 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)	$R_{\theta JL}$	15			°C/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	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.

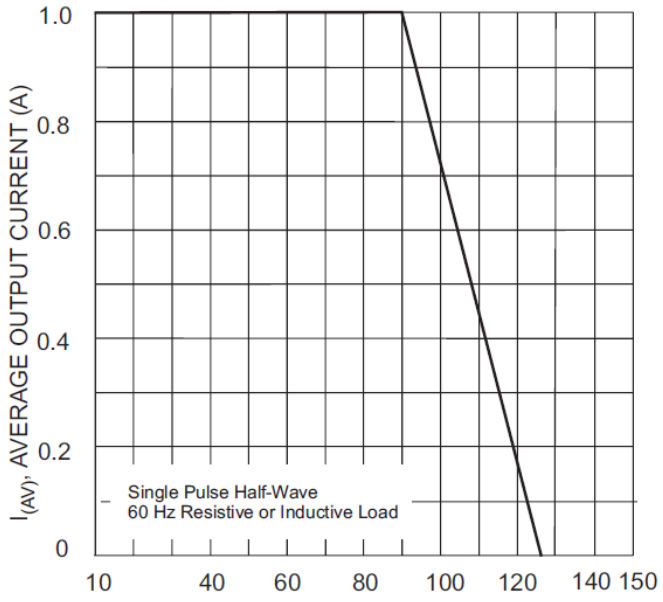


Fig. 1 Forward Current Derating Curve

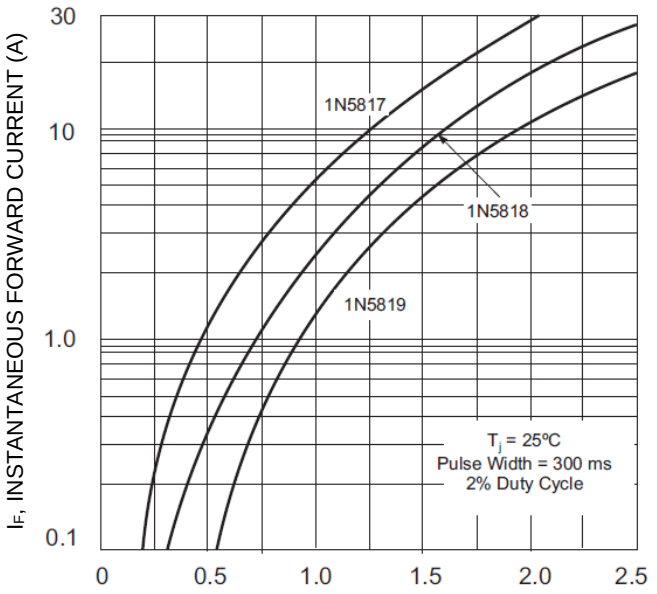


Fig. 2 Typical Forward Characteristics

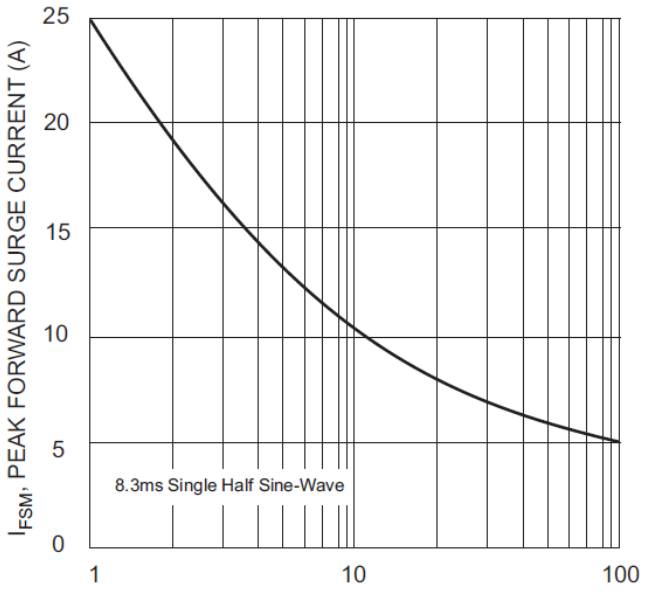


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

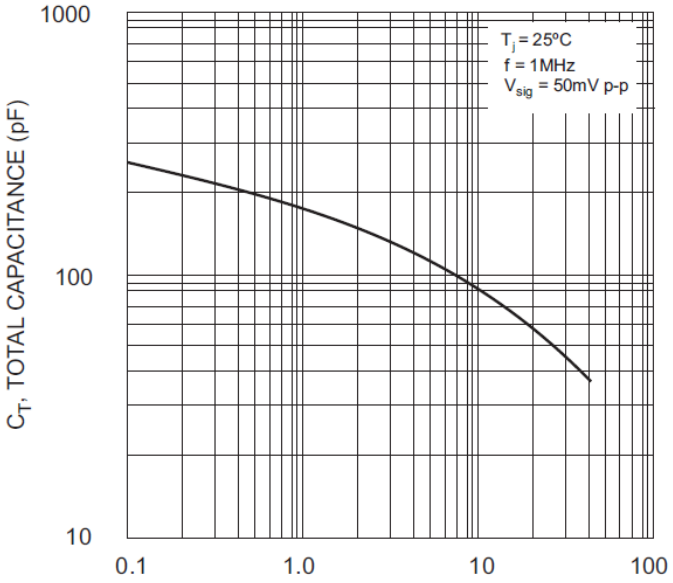
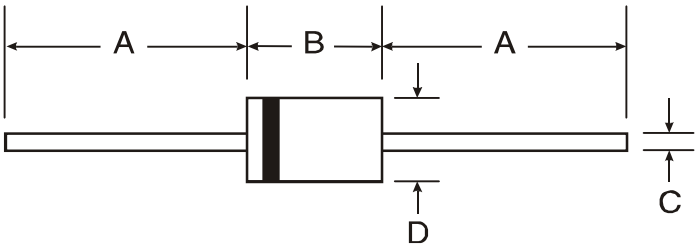


Fig. 4 Typical Total Capacitance

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		