

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Plastic Material-UL Flammability 94V-0

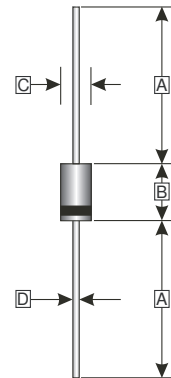
MECHANICAL DATA

- Case: Molded plastic
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

ORDER INFORMATION

Part Number	Type
1N518G	Lead (Pb)-free
1N518G-C	Lead (Pb)-free and Halogen-free

DO-41



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP.)	
B	4.10	5.21
C	2.00	3.00
D	0.60	0.90

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

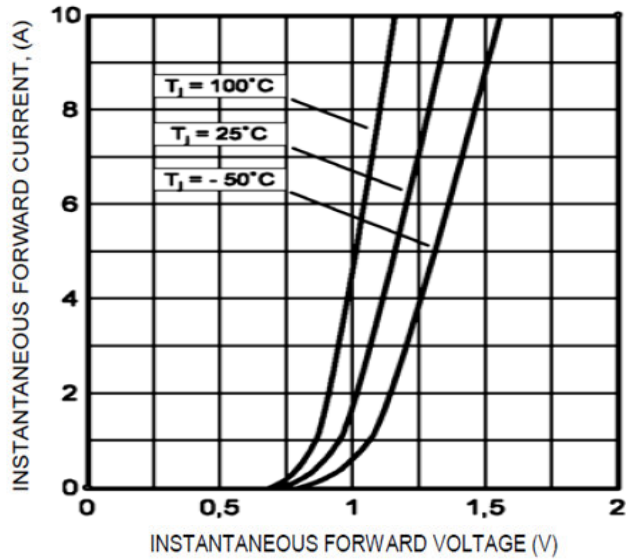
Parameter	Symbol	Part Numbers	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	2000	V	
Maximum RMS Voltage	V_{RMS}	1400		
Maximum DC Blocking Voltage	V_{DC}	2000		
Average Rectified Output Current ¹	I_F	$T_A=75^\circ\text{C}$	1	A
		$T_A=100^\circ\text{C}$	0.75	
Repetitive Peak Forward Current ($f>15\text{Hz}$)	I_{FRM}	10	A	
Peak Forward Surge Current, 50Hz sine-wave	I_{FSM}	50		
I^2t Rating for Fusing ($t<10\text{ms}$)	I^2t	12.5	A ² S	
Forward Voltage @ $I_F=1\text{A}$	V_F	$T_J=25^\circ\text{C}$	1.1	V
Peak Reverse Current @Rated DC Blocking Voltage	I_R	$T_J=25^\circ\text{C}$	5	μA
		$T_J=100^\circ\text{C}$	200	
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	45	$^\circ\text{C/W}$	
Operating & Storage Temperature Range	T_J, T_{STG}	-55~150	$^\circ\text{C}$	

Notes:

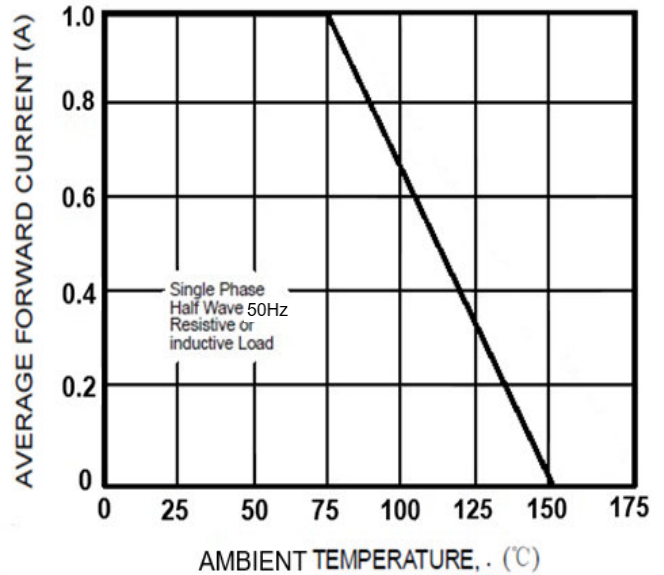
1. Valid, if leads are kept at ambient temperature at a distance of 10mm from case.

RATINGS AND CHARACTERISTIC CURVES

TYPICAL FORWARD CHARACTERISTICS



FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT

