

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

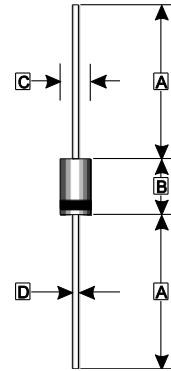
FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

MECHANICAL DATA

- Case: DO-41
- Case Material: Molded plastic, UL Flammability classification rating 94V-0
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Cathode band

DO-41



ORDER INFORMATION

Part Number	Type
1N4001G~1N4007G	Lead (Pb)-free
1N4001G-C~1N4007G-C	Lead (Pb)-free and Halogen-free

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 Number							Unit
		1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Forward Rectified Current ¹ @ $T_L=75^\circ\text{C}$	I_F	1							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Forward Voltage @ $I_F=1\text{A}$	V_F	1							V
Peak Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	5							μA
	$T_A=125^\circ\text{C}$	100							
Typical Junction Capacitance ²	C_J	12							pF
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	65							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150							$^\circ\text{C}$

Notes:

1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1MHz and Applied reverse Voltage of 4V DC.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Forward Current Derating Curve

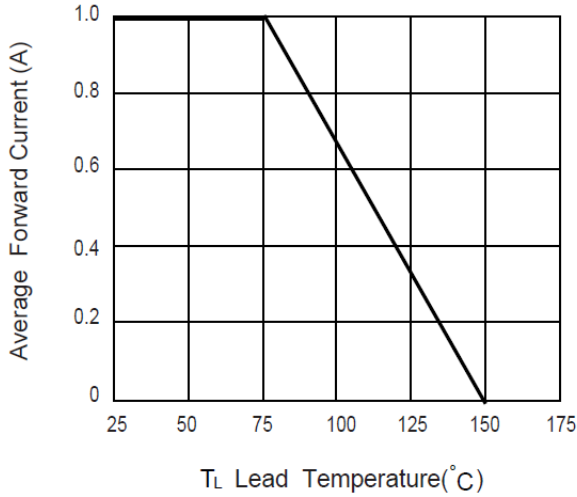


Fig. 2 Typ. Forward Characteristics

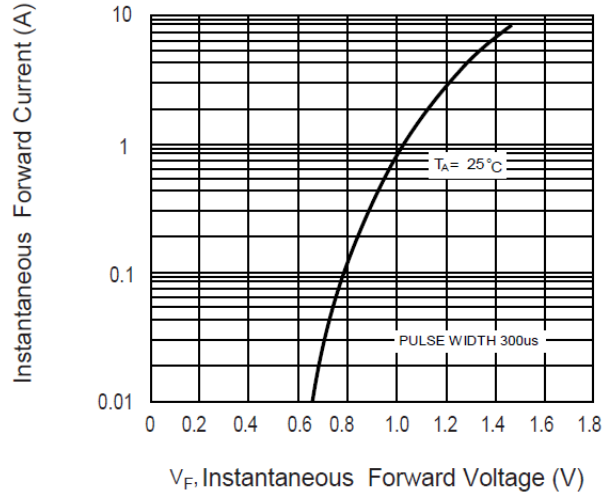


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

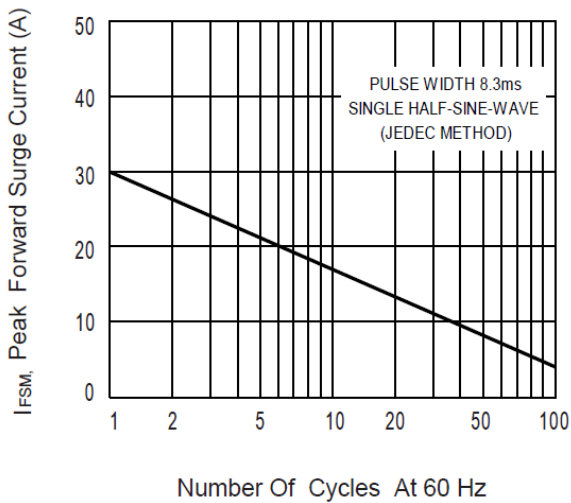


Fig.4 Typical Reverse Characteristics

