

1N4001 THRU 1N4007

AXIAL GENERAL PURPOSE RECTIFIER

DO-41 Axial General Purpose Rectifier

● Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

● Applications

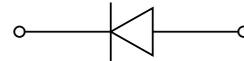
For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer and telecommunication

● Mechanical Data

- Case: DO-41
Molding compound meets UL 94V-0 flammability rating
- Terminals: Solder plated, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Cathode line denotes the cathode end

● Function Diagram

Reverse Voltage
50-1000 V
Forward Current
1 Ampere



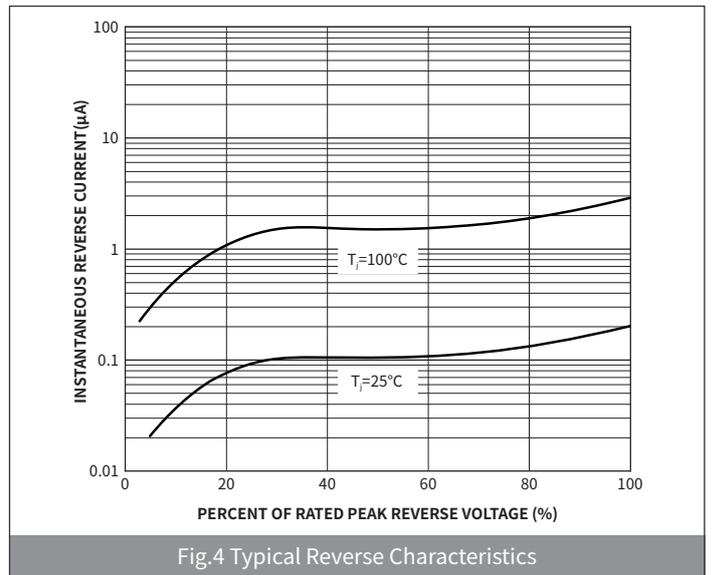
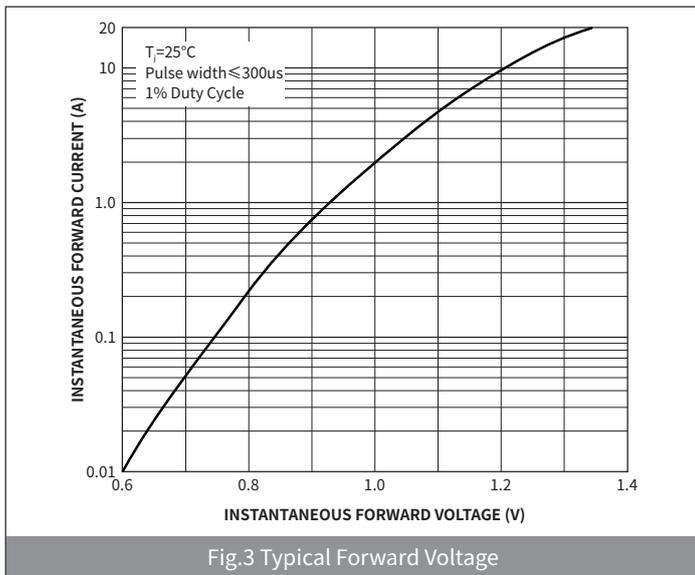
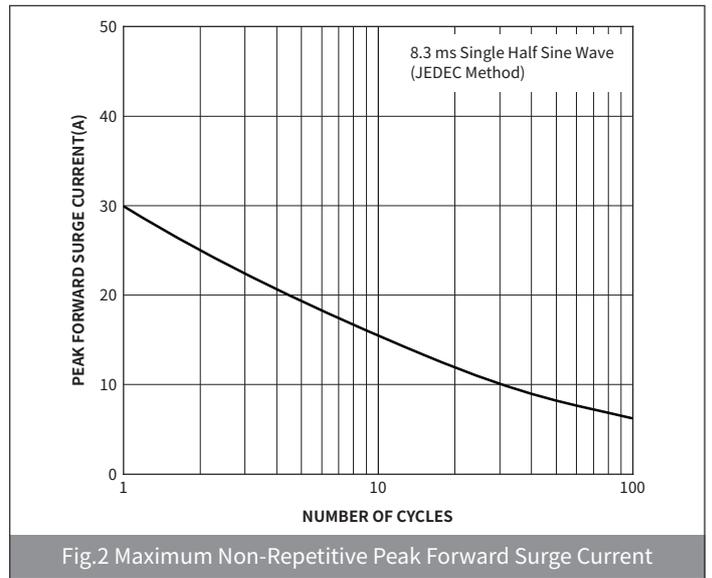
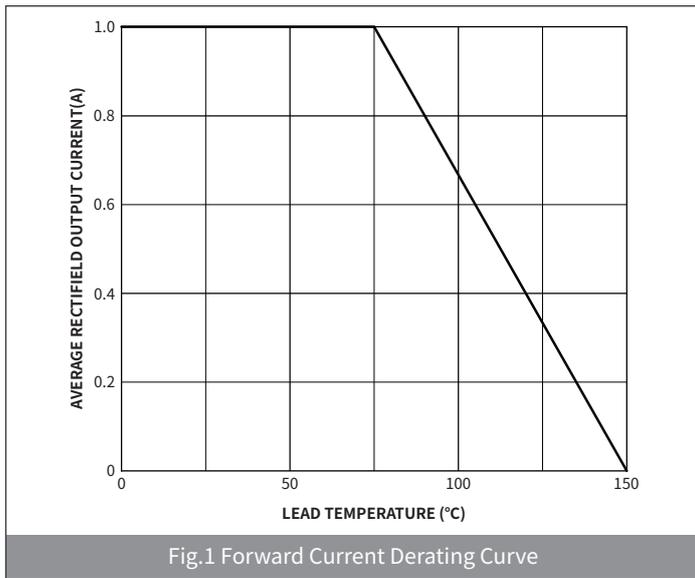
● Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007
Device marking code			1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum Average Forward Rectified Current @ 60Hz sinewave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	1.0						
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	30						
Storage temperature	T_{stg}	°C	-55 ~ +150						
Junction temperature	T_j	°C	-55 ~ +150						
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	55						
	$R_{\theta J-L}$	°C /W	25						

● Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007
Maximum instantaneous forward voltage	$I_F=1.0A$	V_F	V	1.1						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{RRM}, T_A=25^\circ C$	I_{R1}	μA	5						
	$V_R=V_{RRM}, T_A=100^\circ C$	I_{R2}		50						

● Ratings And Characteristics Curves ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)



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● Ordering Information

PACKAGE	UNIT WEIGHT(g)	BOX(pcs)	CARTON(pcs)
DO-41	0.245	5000	50000

● Package Outline Dimensions (DO-41)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.100	5.200	0.161	0.205
B	2.000	2.700	0.080	0.107
C	25.400	-	1.000	-
e	0.700	0.900	0.028	0.034

