

A-405 Axial General Purpose Rectifier

● Features

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

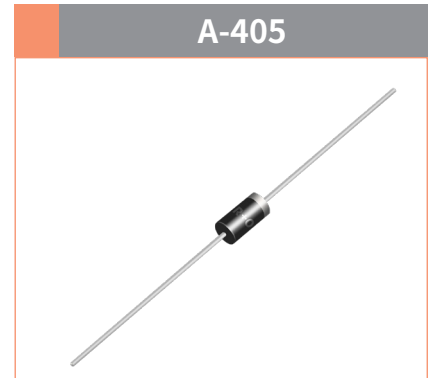
Reverse Voltage
50-1000 V
Forward Current
1 Ampere

● Applications

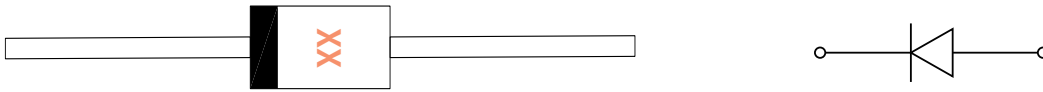
For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer and telecommunication

● Mechanical Data

- Case: A-405
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



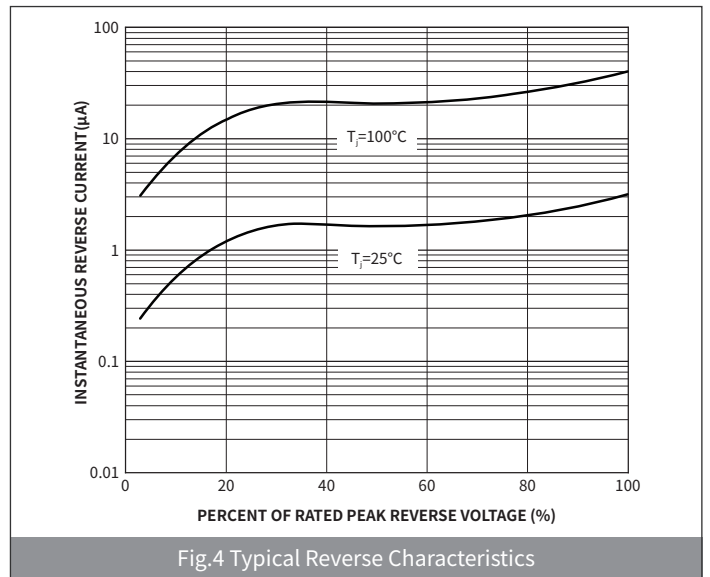
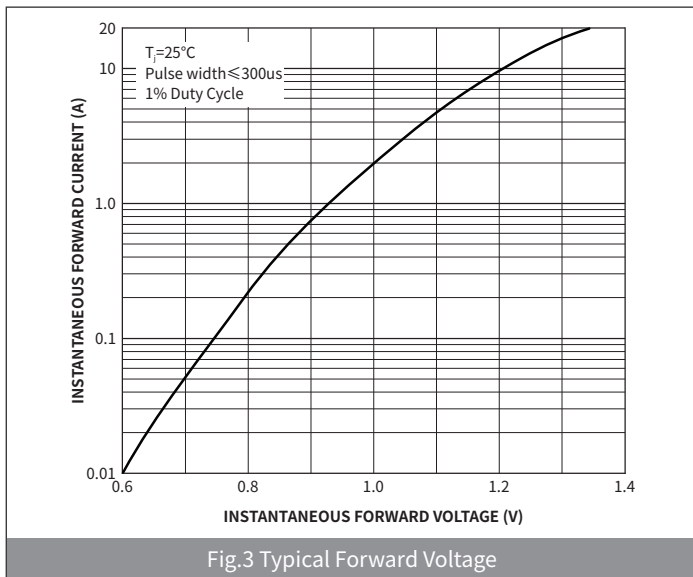
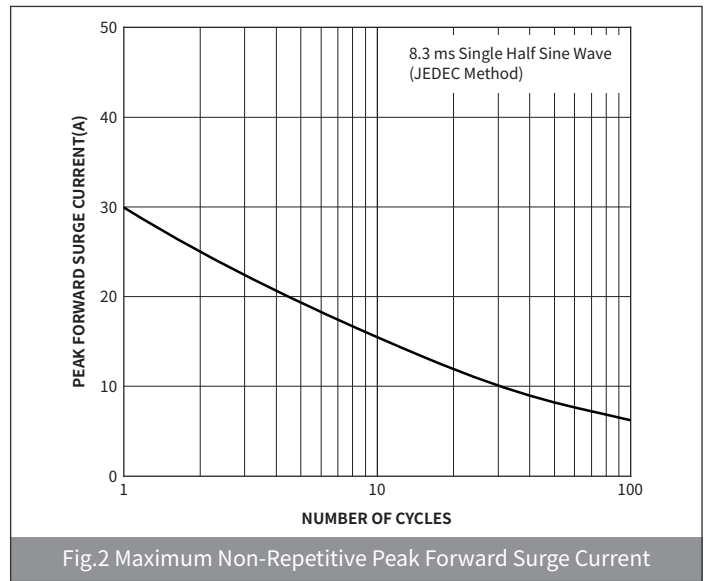
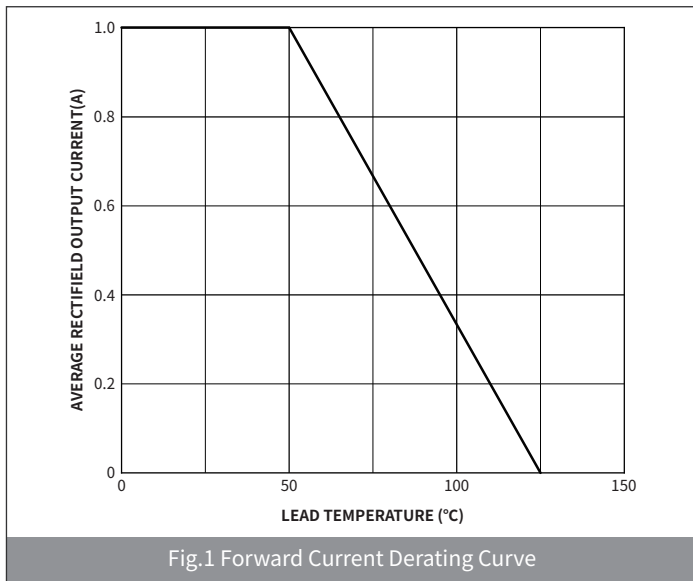
● Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N4001S	1N4002S	1N4003S	1N4004S	1N4005S	1N4006S	1N4007S
Device marking code			1N4001S	1N4002S	1N4003S	1N4004S	1N4005S	1N4006S	1N4007S
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 ~ +125						
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	1N4001S	1N4002S	1N4003S	1N4004S	1N4005S	1N4006S	1N4007S
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)



1N4001S THRU 1N4007S

AXIAL GENERAL PURPOSE RECTIFIER

● Ordering Information

PACKAGE	UNIT WEIGHT(g)	BOX(pcs)	CARTON(pcs)
A-405	0.227	5000	50000

● Package Outline Dimensions (A-405)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.200	5.200	0.166	0.205
B	2.000	2.700	0.080	0.107
C	25.400	-	1.000	-
e	0.530	0.640	0.021	0.025

