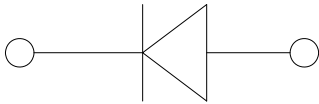




## General Purpose Rectifier



## Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Solder dip 275 °C max. 7 s, per JESD 22-B106

## Mechanical Data

- **Package:** DO-204AL(DO-41)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

■ Maximum Ratings (T<sub>a</sub>=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
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, T <sub>a</sub> =50°C	I <sub>F(AV)</sub>	A	1.0						
Surge(Non-repetitive)Forward Current @ 60Hz Half-sine wave,1 cycle, T <sub>a</sub> =25°C	IFSM	A	30						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction Temperature	T <sub>j</sub>	°C	-55~+125						

■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =1.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM1</sub>	μA	T <sub>a</sub> =25°C	2.5						
	I <sub>RRM2</sub>		T <sub>a</sub> =100°C	50						
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	12						

■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007
Thermal Resistance(Typical)	R <sub>θJ-A</sub>	°C/W	50						

## ■ Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N4001~1N4007	D1	Approximate 0.27	Approximate 5000	5000	50000	Tape
1N4001~1N4007	C1	Approximate 0.27	Approximate 1000	1000	50000	Bulk



# 1N4001 THRU 1N4007

## ■ Characteristics (Typical)

FIG.1: I<sub>o</sub>-T<sub>a</sub> Curve

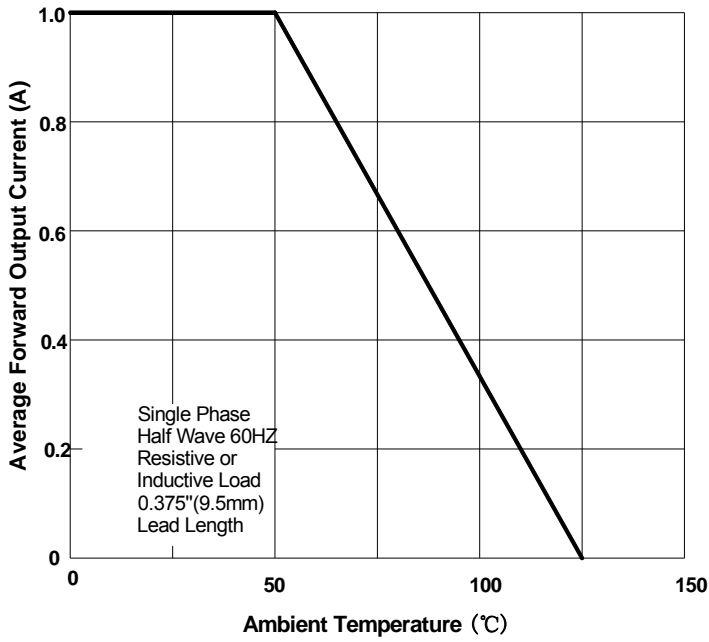


FIG.2: Surge Forward Current Capability

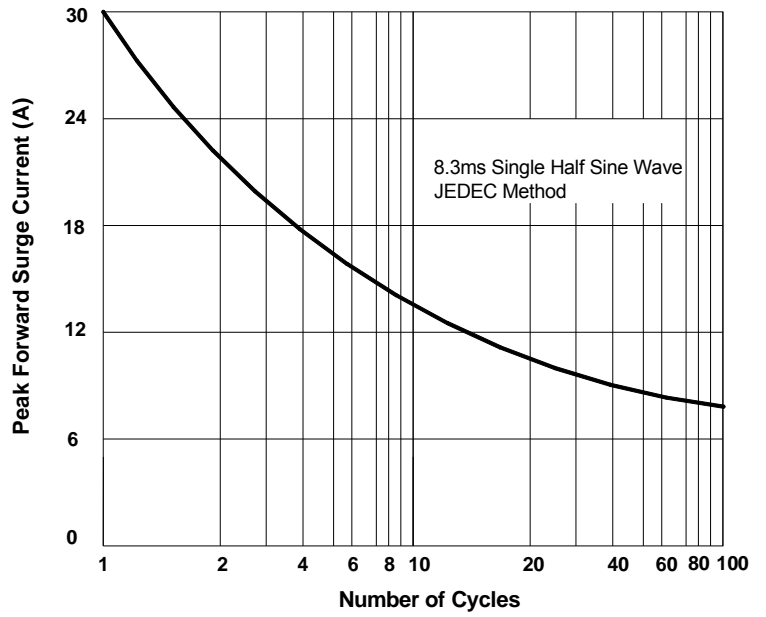


FIG.3: Forward Voltage

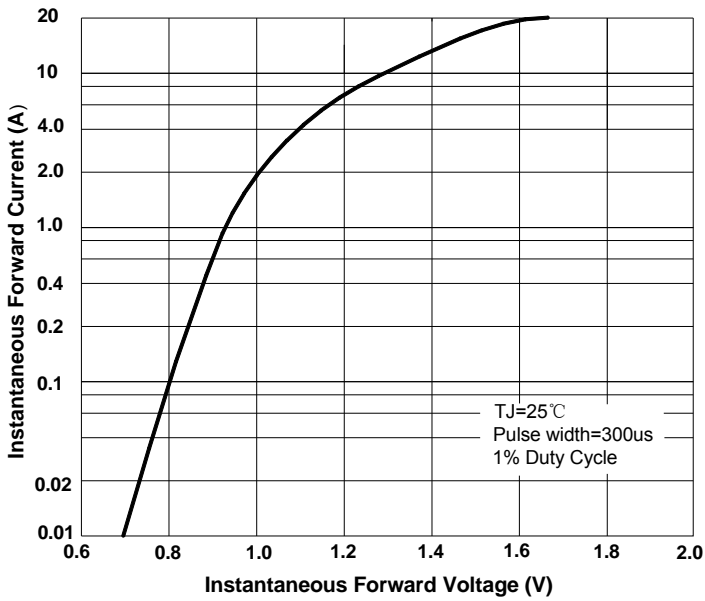
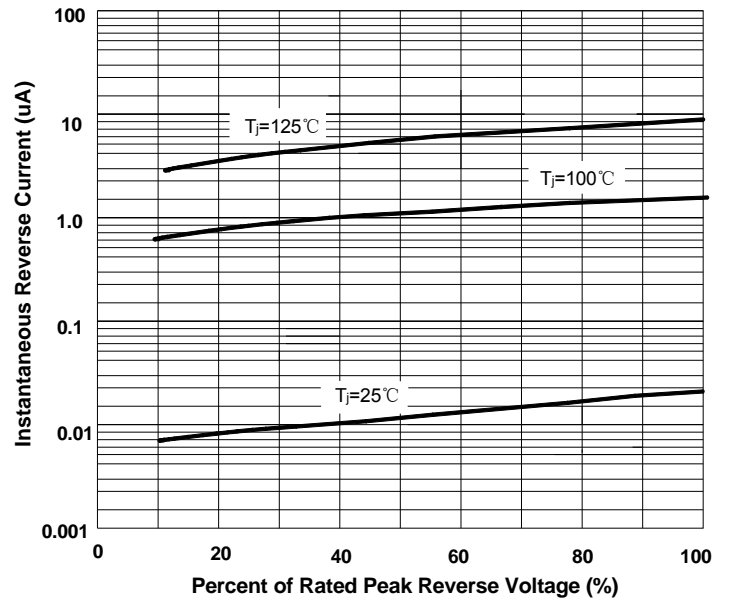
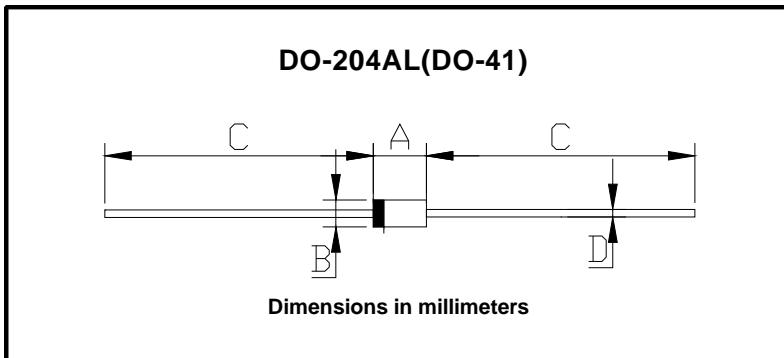


FIG.4: Typical Reverse Characteristics





## ■ Outline Dimensions



<b>DO-204AL(DO-41)</b>		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.69	0.86



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