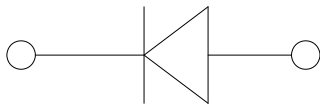
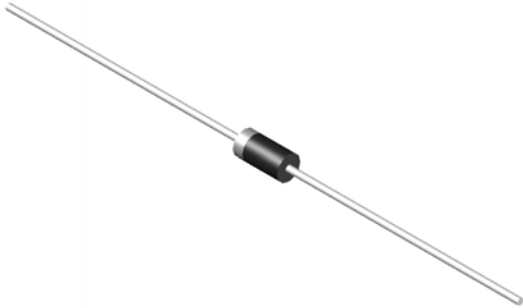


General Purpose Rectifier



Features

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

Typical Applications

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

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 (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	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta =85°C	IF(AV)	A	1.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	IFSM	A	30						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			60						
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I²t	A²s	3.735						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	Cj	pF	6						
Storage Temperature	Tstg	°C	-55 ~ +150						
Junction Temperature	Tj	°C	-55 ~ +150						

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	IR	µA	Tj =25°C	2.5						
			Tj =125°C	50						



1N4001 THRU 1N4007

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007
Typical Thermal Resistance	R _{θJ-A}	°C/W	60						

■ Ordering Information (Example)

PREFERRED 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

■ Characteristics (Typical)

FIG.1: I_o-T_a Curve

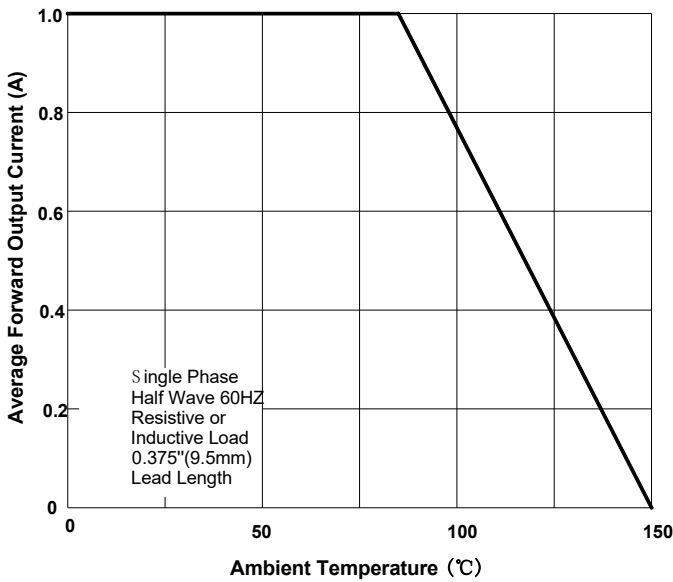


FIG.2: Forward Surge Current Capability

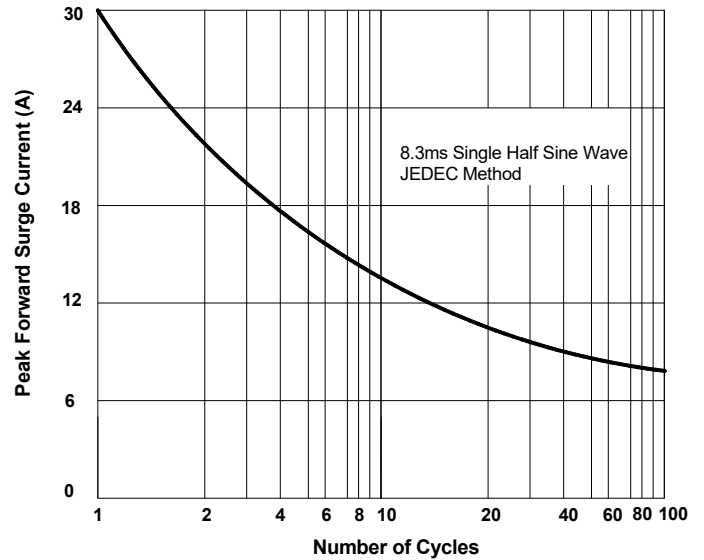


FIG.3: Forward Voltage

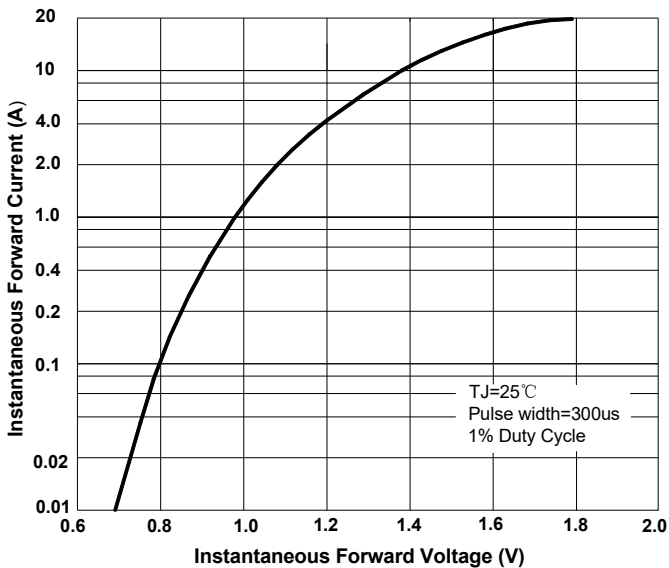
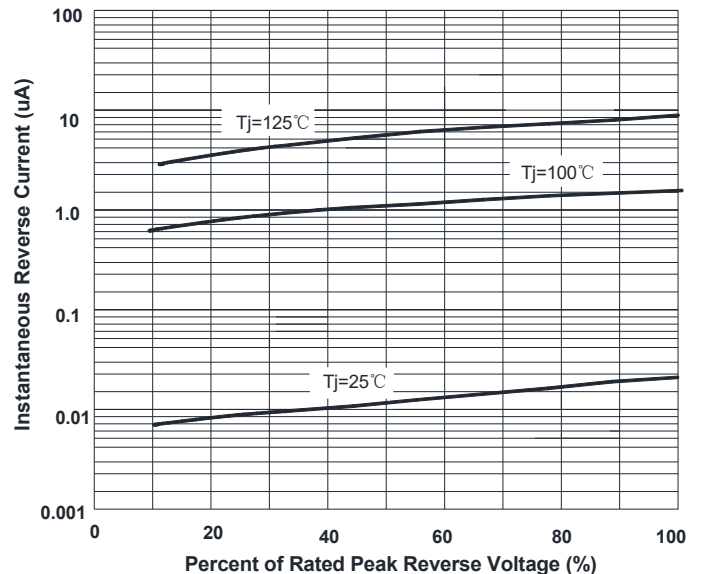


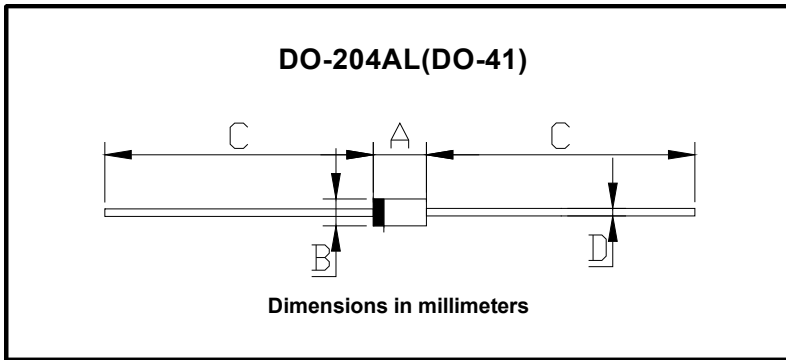
FIG.4: Typical Reverse Characteristics





1N4001 THRU 1N4007

■ Outline Dimensions



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



1N4001 THRU 1N4007

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.