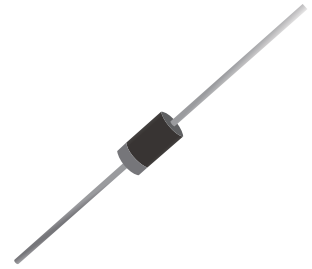


## General Purpose Rectifier Diodes

### Features

- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0
- Lead free in comply with EU RoHS 2011/65/EU directives



### Mechanical Data

- Case: DO-41
- Polarity: Color band denotes cathode
- Mounting position :Any

### Ordering Information

Part Number	Shipping	Packing Type
1N4001 THRU 1N4007	5000PCS/Box	Box

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Characteristics	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =75 °C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0 100							μA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	30							pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	65							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Note:(1) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

(2) Thermal resistance junction to case.



Characteristics Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

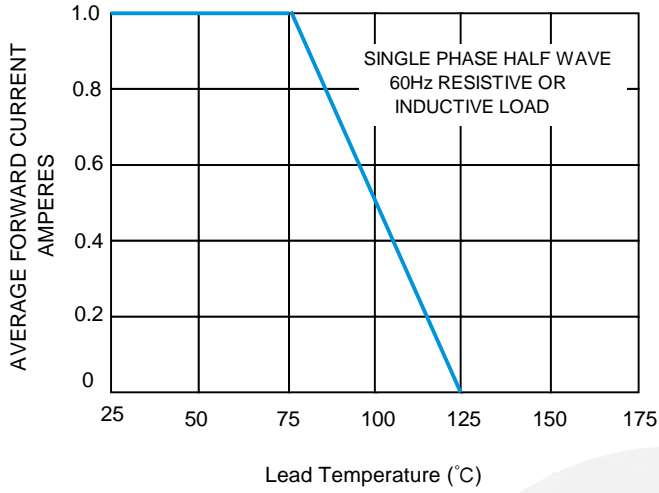


FIG. 2 MAXIMUM NON-REPETITIVE SURGE CURRENT

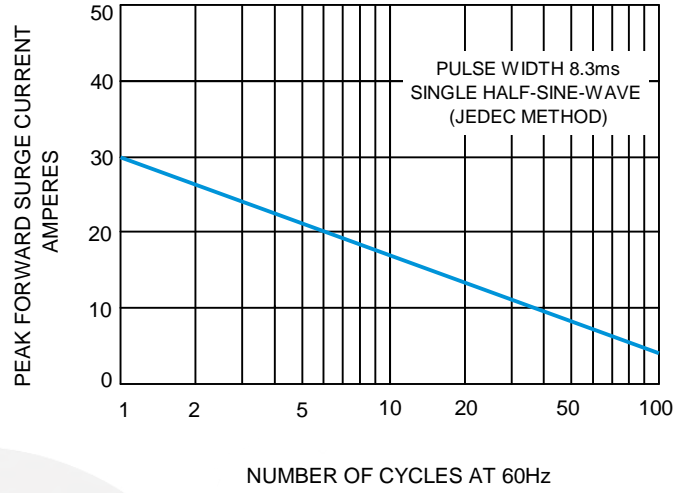


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

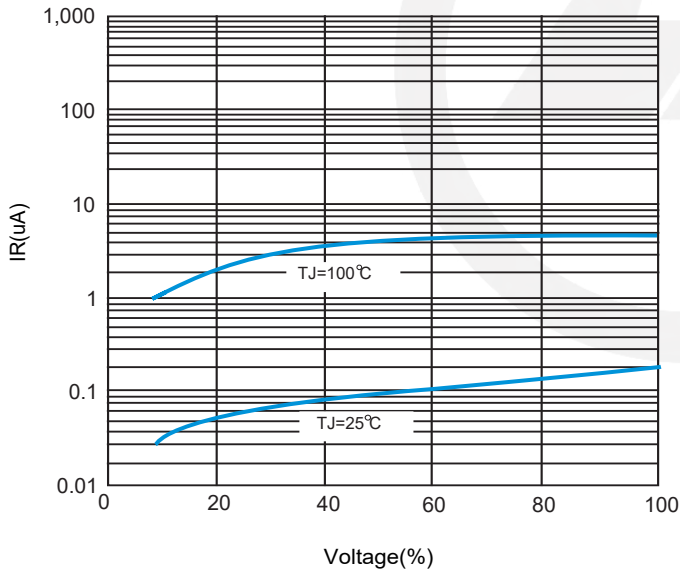
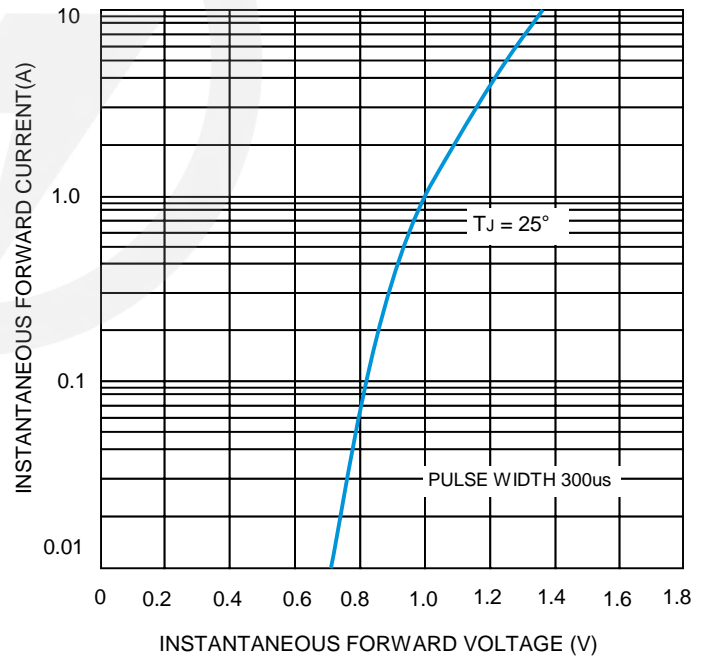
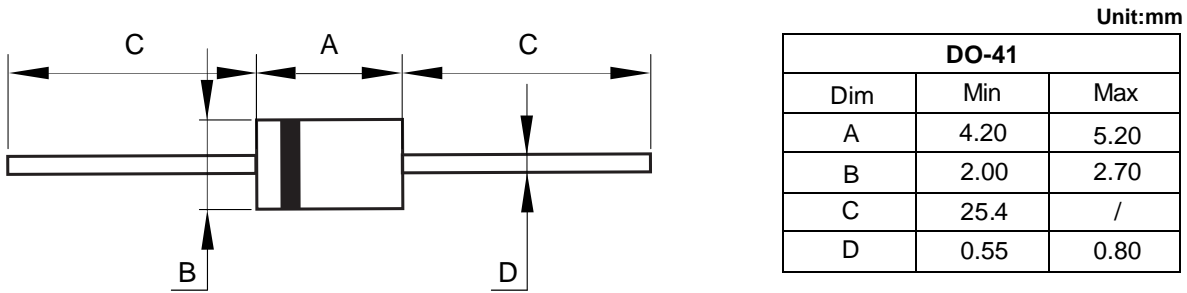


FIG. 4 TYPICAL FORWARD CHARACTERISTICS



## DO-41 Package Outline

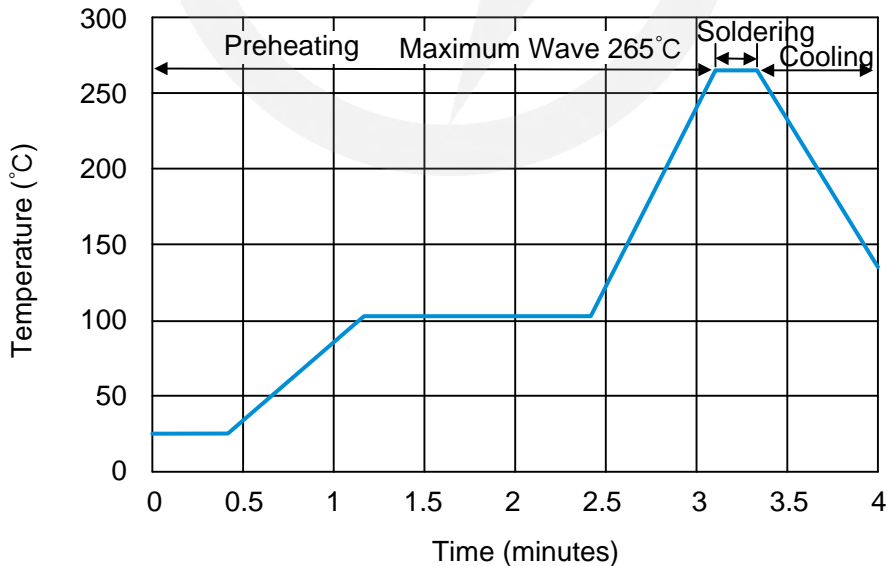


## Marking

Type number	Marking code
1N4001	1N4001
1N4002	1N4002
1N4003	1N4003
1N4004	1N4004
1N4005	1N4005
1N4006	1N4006
1N4007	1N4007

## Recommended Soldering Conditions

### Wave Soldering



Item	Conditions
Peak Temperature	265°C
Dipping Time	10 seconds
Soldering	1 time

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## Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.8.11	2024.8.11	3.0	New File	/	Ding	