

## 1N4004G

## GLASS PASSIVATED SILICON RECTIFIER

## DESCRIPTION

The UTC **1N4004G** is a glass passivated silicon rectifier, it uses UTC's advanced technology to provide customers with high forward surge current and low reverse leakage, etc.

### FEATURES

- \* Low reverse leakage
- \* High forward surge current capability





### ORDERING INFORMATION

Ordering Number		Pin Assignment		Decking	
Halogen Free	Раскаде	1	2	Packing	
1N4004GP-Z41-B	DO-41	к	А	Tape Box	
1N4004GP-Z41-R	DO-41	К	А	Tape Reel	
	Halogen Free 1N4004GP-Z41-B	Halogen Free         Package           1N4004GP-Z41-B         DO-41	Halogen FreePackage1N4004GP-Z41-BDO-41	Halogen FreePackage01N4004GP-Z41-BDO-41KA	

#### Note: Pin Assignment: A: Anode K: Cathode

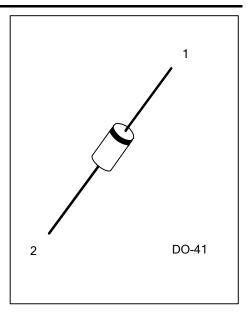
1N4004GL-Z41-B (1)Packing Type (2)Package Type (3)Lead Free	<ul> <li>(1) B: Tape Box, R: Tape Reel</li> <li>(2) Z41: DO-41</li> <li>(3) L: Lead Free, P: Halogen Free</li> </ul>
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#### MARKING



- Cathode Band for uni-directional Only
  - L: Lead Free
- P: Halogen Free
- Date Code





## ABSOLUTE MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

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

PARAMETER	SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage	V <sub>RWM</sub>	400	V
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	V
Maximum RMS Reverse Voltage	V <sub>RMS</sub>	280	V
DC Blocking Voltage	V <sub>R</sub>	400	V
Average Rectified Output Current (T <sub>A</sub> =75°C)	lo	1.0	А
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	30	A
Junction Temperature	ΤJ	-55~+150	°C
Storage Temperature	T <sub>STG</sub>	-55~+150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

#### THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 2)	θ <sub>JA</sub>	50	°C/W

## ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V <sub>FM</sub>	I <sub>F</sub> =1.0A			1.1	V
DC Reverse Current at Rated DC Blocking	I <sub>RM</sub>	T <sub>A</sub> =25°C			5.0	μA
Voltage		T <sub>A</sub> =100°C			50	μA
Junction Capacitance (Note 1)	CJ			15		pF

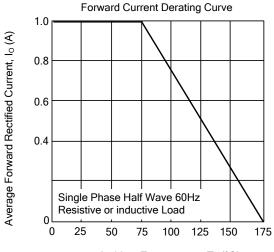
Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

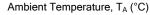
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted.

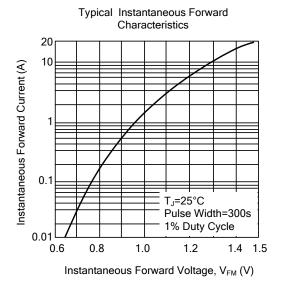


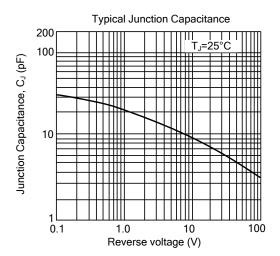
# 1N4004G

## TYPICAL CHARACTERISTICS

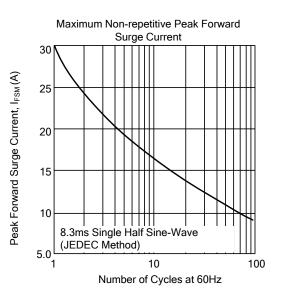




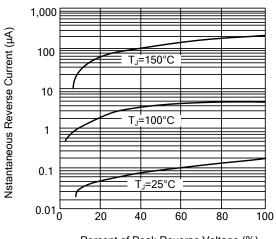




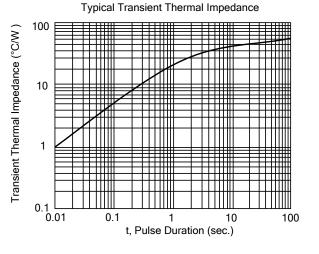




Typical Reverse Characteristics



Percent of Peak Reverse Voltage (%)



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