



# 1N4004G

**DIODE**

## GLASS PASSIVATED SILICON RECTIFIER

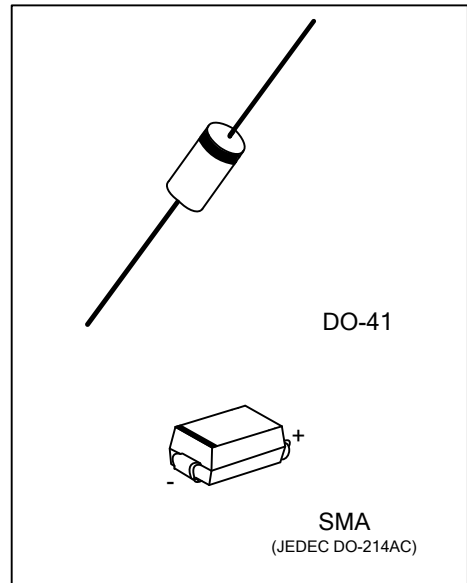
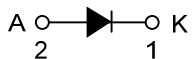
### DESCRIPTION

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

### SYMBOL



### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
1N4004GL-SMA-R	1N4004GP-SMA-R	SMA	K	A	Tape Reel
1N4004GL-Z41-B	1N4004GP-Z41-B	DO-41	K	A	Tape Box
1N4004GL-Z41-R	1N4004GP-Z41-R	DO-41	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

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

SMA	DO-41
<p>UTC □□□□ → Date Code 4004G □ → L: Lead Free / P: Halogen Free Cathode Band for uni-directional Only ←</p>	<p>→ Cathode Band for uni-directional Only 4004G □ → L: Lead Free / P: Halogen Free □□□□ → Date Code</p>

### ■ 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	$V_{RWM}$	400	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	400	V
DC Blocking Voltage	$V_R$	400	V
Average Rectified Output Current ( $T_A=75^\circ\text{C}$ )	$I_O$	1.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	30	A
Junction Temperature	$T_J$	-55 ~ +150	°C
Storage Temperature	$T_{STG}$	-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)	SMA	95	°C/W
	DO-41	50	°C/W

### ■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

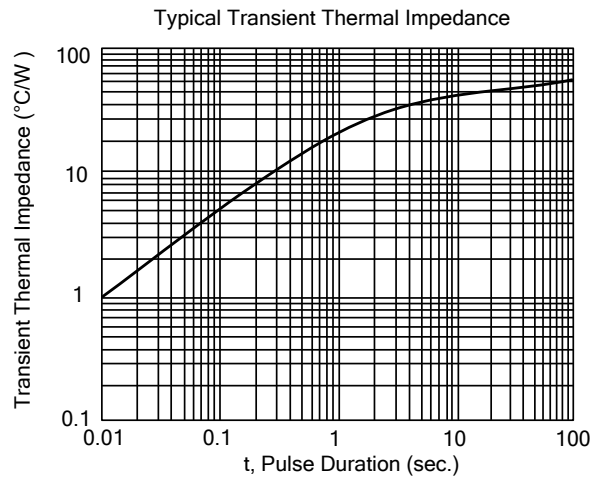
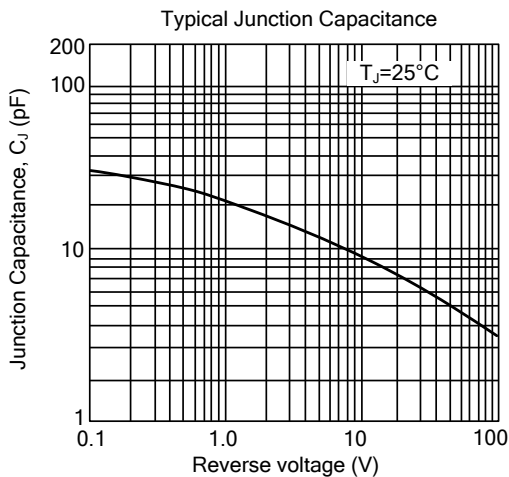
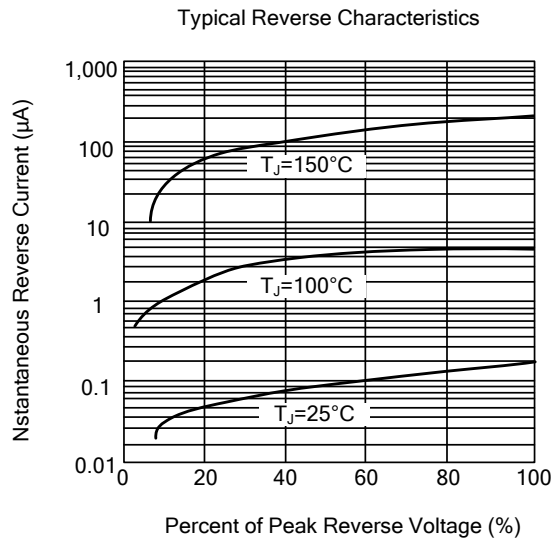
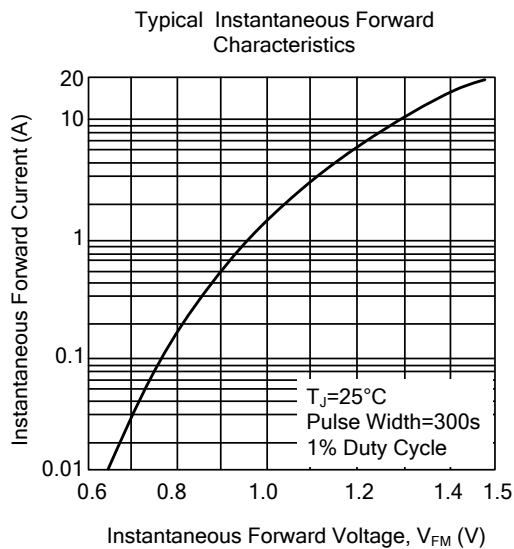
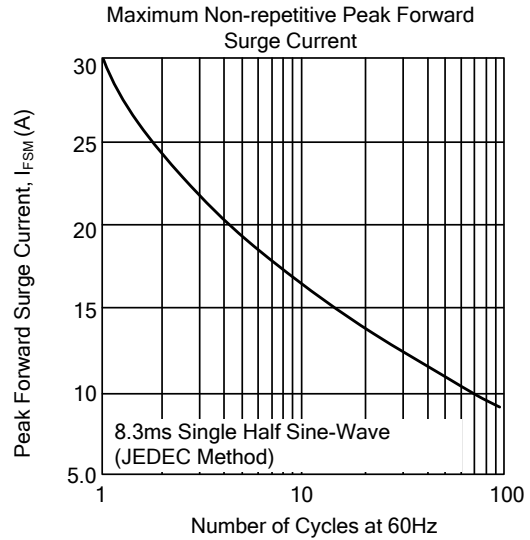
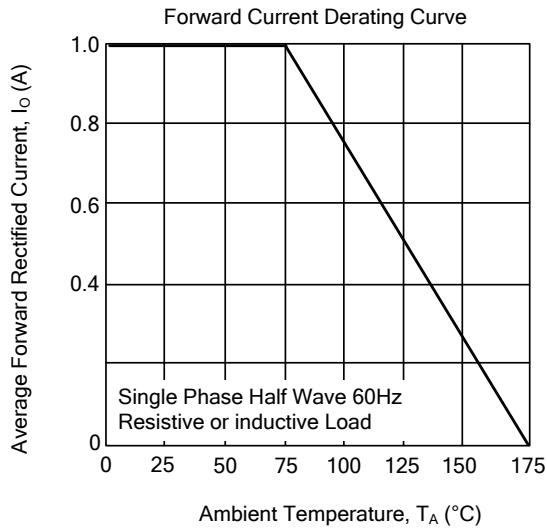
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	$V_{FM}$	$I_F=1.0\text{A}$			1.1	V
DC Reverse Current at Rated DC Blocking Voltage	$I_{RM}$	$T_A=25^\circ\text{C}$			5.0	$\mu\text{A}$
		$T_A=100^\circ\text{C}$			50	$\mu\text{A}$
Junction Capacitance (Note 1)	$C_J$			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.

## TYPICAL CHARACTERISTICS



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