



1N4004G

DIODE

GLASS PASSIVATED SILICON RECTIFIER

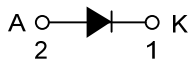
■ **DESCRIPTION**

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.

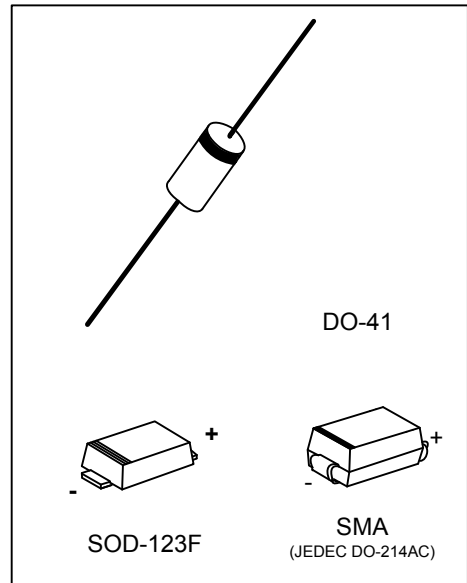
■ **FEATURES**

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

■ **SYMBOL**



■ **ORDERING INFORMATION**

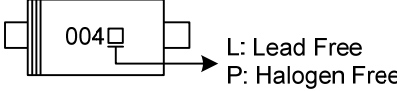
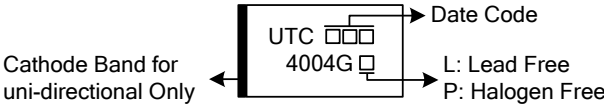
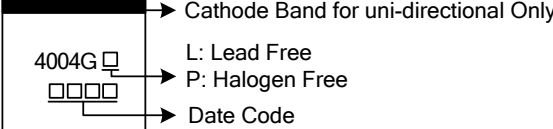


Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
1N4004GL-CA2F-R	1N4004GP-CA2F-R	SOD-123F	K	A	Tape Reel
1N4004GL-SMA-R	1N4004GP-SMA-R	SMA	K	A	Tape Reel
1N4004GL-Z41-B	1N4004GP-Z41-B	DO-41	K	A	Tape Box
1N4004GL-Z41-R	1N4004GP-Z41-R	DO-41	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>1N4004GP-CA2F-R</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) B: Tape Box, R: Tape Reel (2) CA2F: SOD-123F, SMA: SMA, Z41: DO-41 (3) P: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

PACKAGE	MARKING
SOD-123F	 <p>L: Lead Free P: Halogen Free</p>
SMA	 <p>Cathode Band for uni-directional Only</p> <p>UTC □□□ → Date Code</p> <p>4004G □ → L: Lead Free P: Halogen Free</p>
DO-41	 <p>Cathode Band for uni-directional Only</p> <p>4004G □ → L: Lead Free P: Halogen Free</p> <p>□□□ → 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)	θ_{JA}	SOD-123F	200	°C/W
		SMA	95	°C/W
		DO-41	50	°C/W

■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

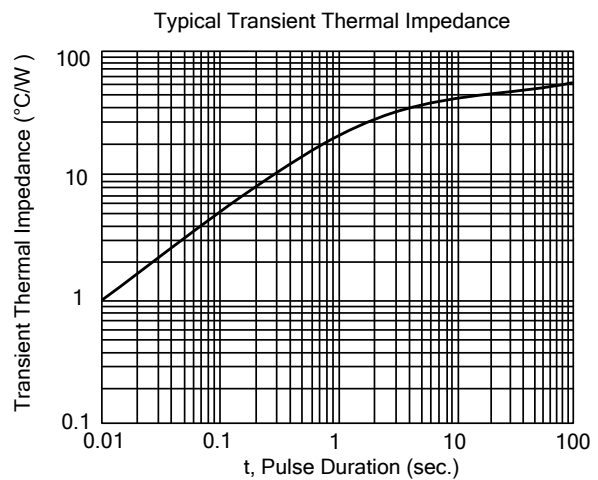
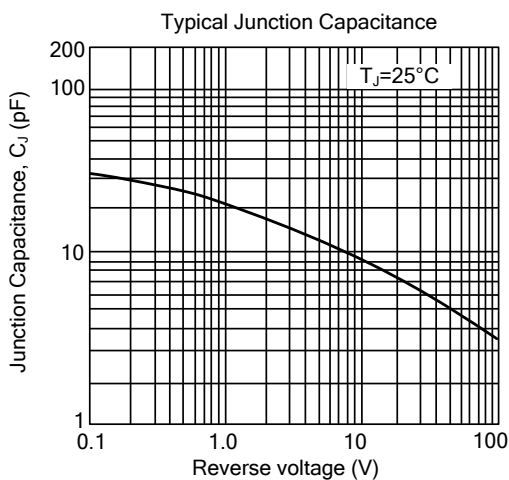
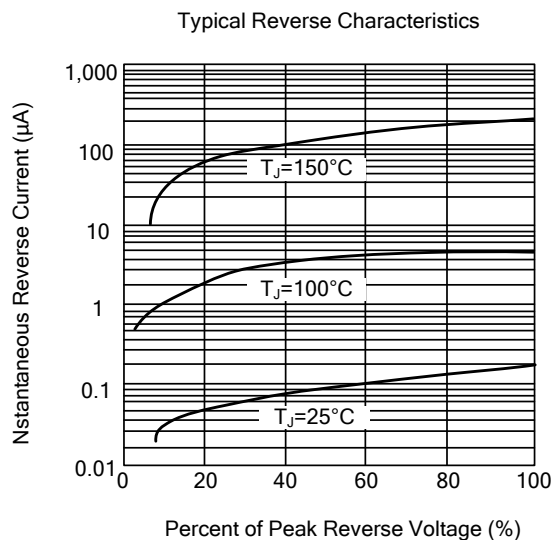
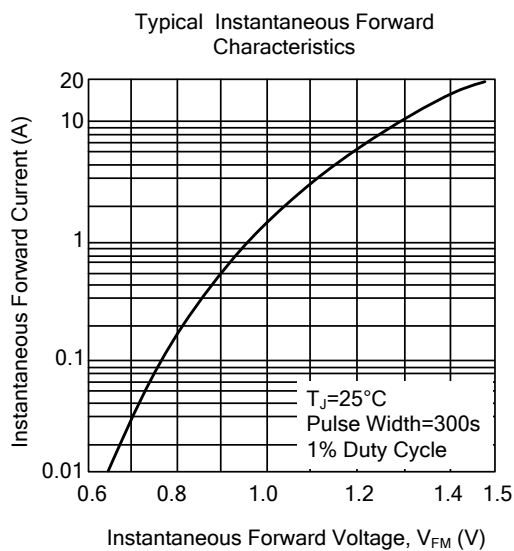
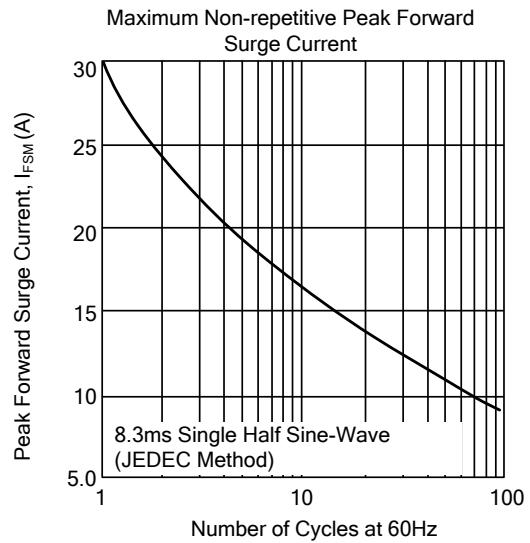
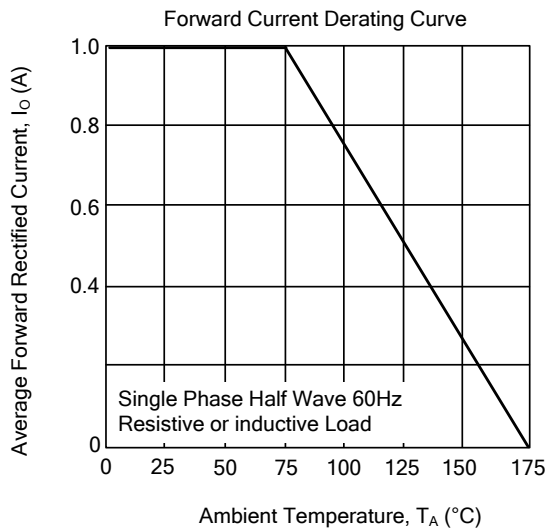
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

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	μA
		$T_A=100^\circ\text{C}$			50	μA
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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