



## 1N4007G

DIODE

### GLASS PASSIVATED SILICON RECTIFIER

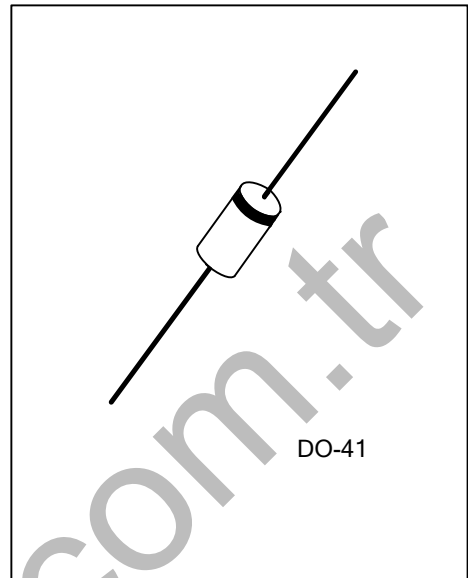
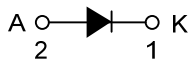
#### DESCRIPTION

The UTC **1N4007G** 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



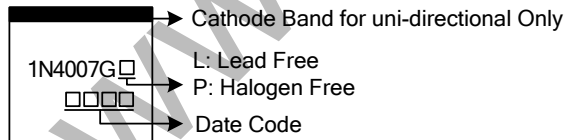
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
1N4007GL-Z41-R	1N4007GP-Z41-R	DO-41	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>1N4007GL-Z41-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Lead Free</li> </ul>	<ul style="list-style-type: none"> <li>(1) 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



### ■ 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	$V_{RWM}$	1000	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Reverse Voltage	$V_{RMS}$	700	V
DC Blocking Voltage	$V_R$	1000	V
Average Rectified Output Current ( $T_A=105^\circ\text{C}$ )	$I_O$	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)	$\theta_{JA}$	50	°C/W

### ■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

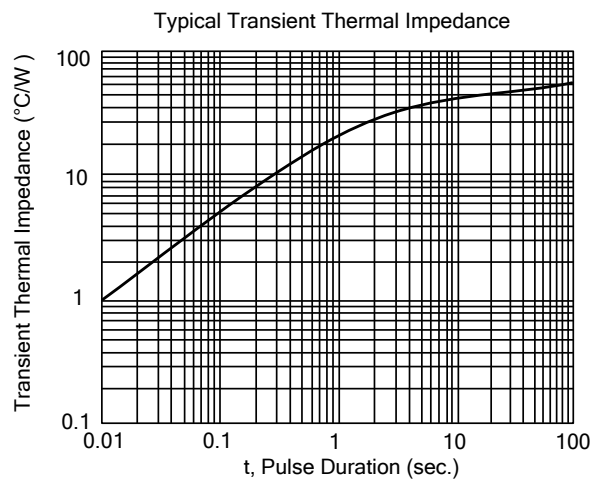
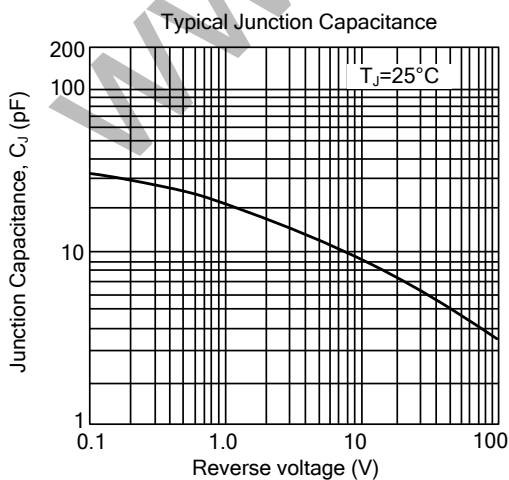
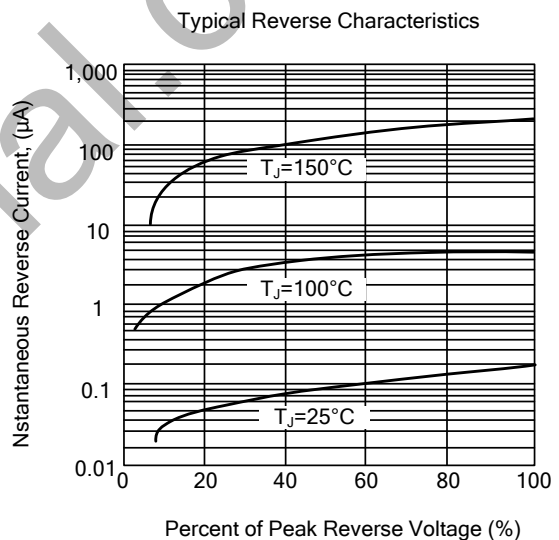
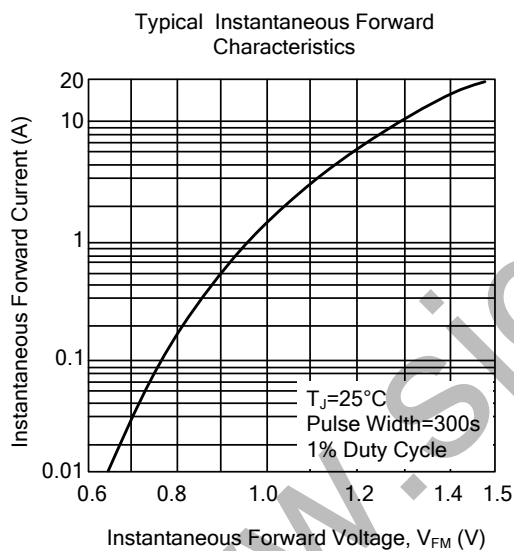
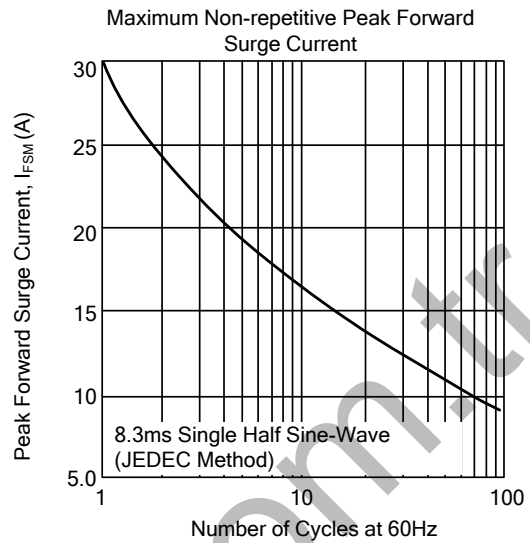
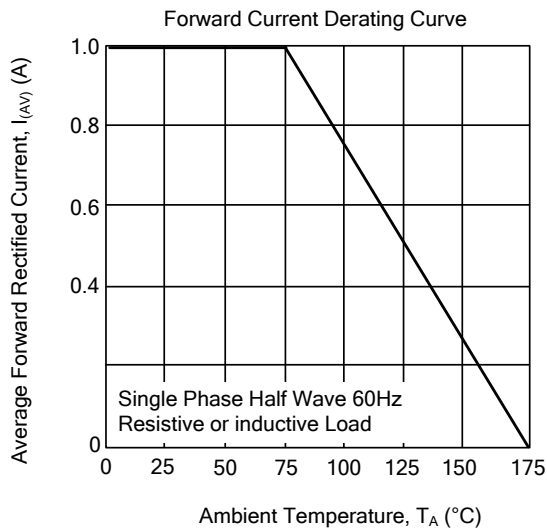
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

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	$\mu\text{A}$
		$T_A=100^\circ\text{C}$			50.0	$\mu\text{A}$
Junction Capacitance (Note 1)	$C_J$			15.0		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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