



## 1N5406G

DIODE

### GLASS PASSIVATED SILICON RECTIFIER

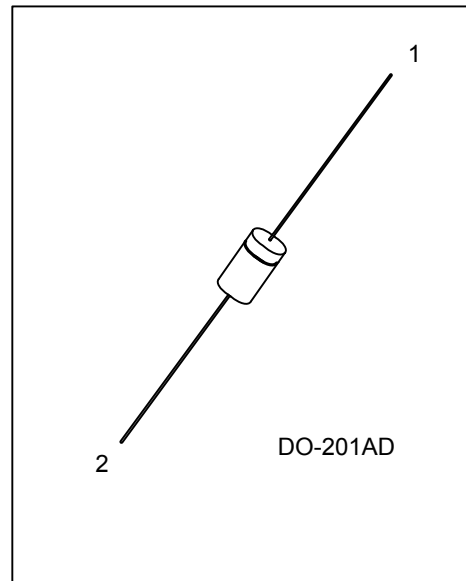
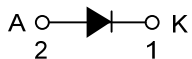
#### DESCRIPTION

The UTC **1N5406G** 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



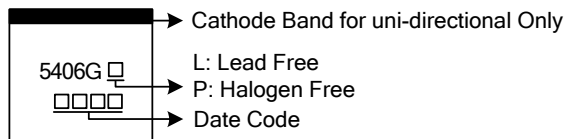
#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
1N5406GL-Z21D-B	1N5406GP-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>1N5406GL-Z21D-B</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) B: Tape Box</li> <li>(2) Z21D: DO-201AD</li> <li>(3) L: Lead Free, P: Halogen Free and Lead 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	$V_{RWM}$	600	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	600	V
RMS Voltage	$V_{RMS}$	420	V
DC Blocking Voltage	$V_{DC}$	600	V
Average Forward Rectified Current 0.375" (9.5mm) Lead Length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	200	A
Junction Temperature	$T_J$	-65~+175	°C
Storage Temperature	$T_{STG}$	-65~+175	°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)	$\theta_{JA}$	20	°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%.

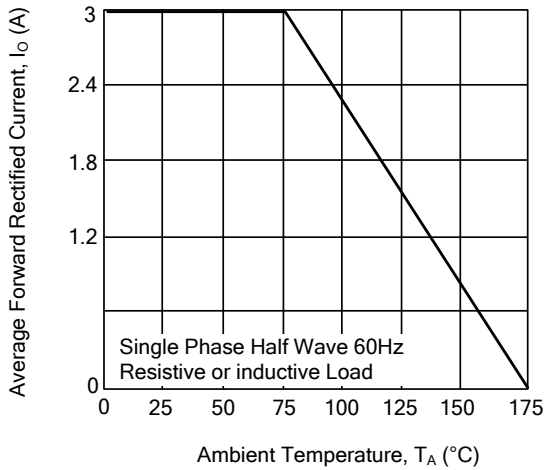
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	$V_F$	$I_F=3.0\text{A}$			1.2	V
DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A=25^\circ\text{C}$			5.0	$\mu\text{A}$
		$T_A=100^\circ\text{C}$			100	$\mu\text{A}$
Junction Capacitance (Note 1)	$C_J$			30.0		pF

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

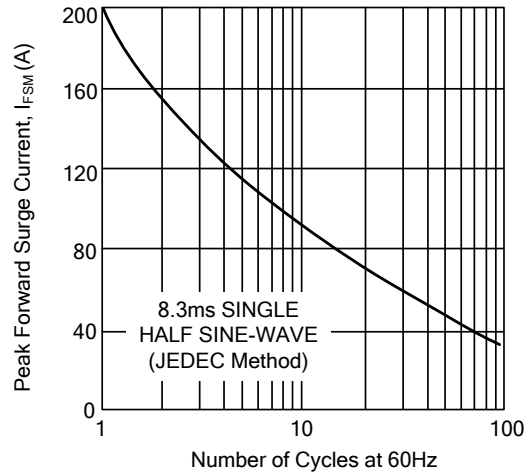
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted.

## TYPICAL CHARACTERISTICS

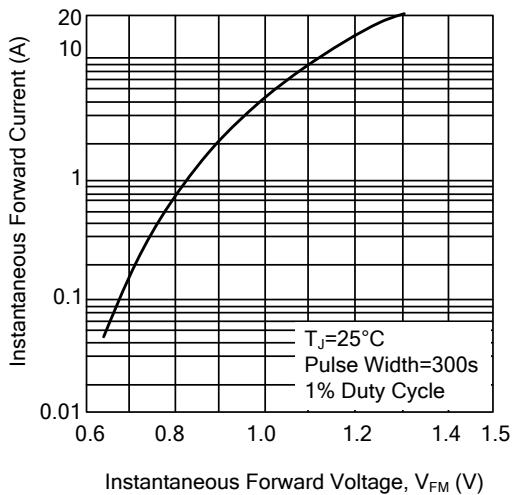
Forward Current Derating Curve



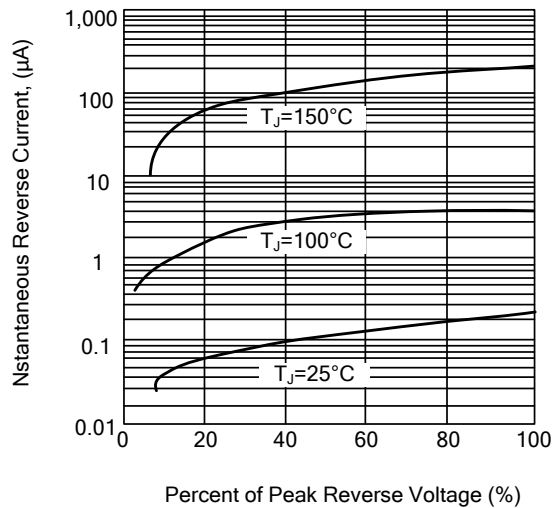
Maximum Non-repetitive Peak Forward Surge Current



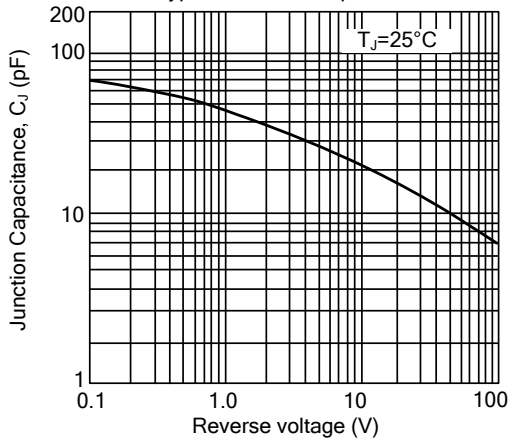
Typical Instantaneous Forward Characteristics



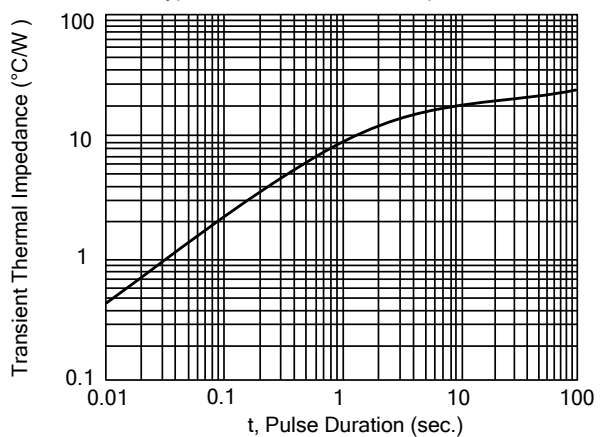
Typical Reverse Characteristics



Typical Junction Capacitance



Typical Transient Thermal Impedance



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