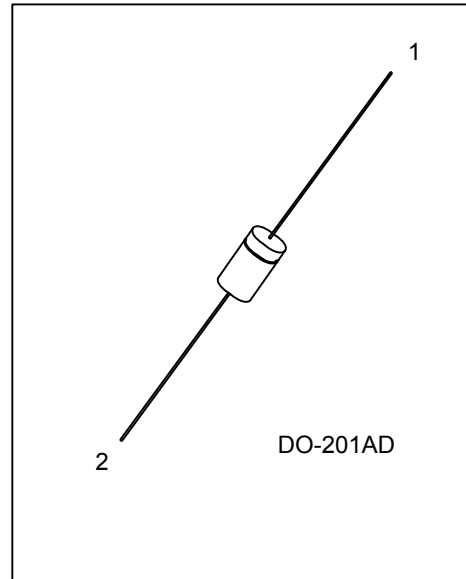




## 1N5401G

DIODE

### GLASS PASSIVATED SILICON RECTIFIER



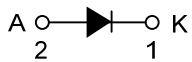
#### DESCRIPTION

The UTC **1N5401G** 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



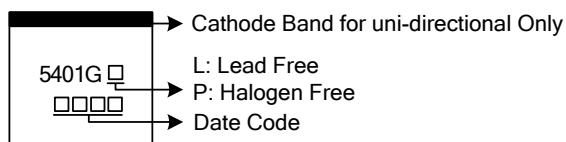
#### ORDERING INFORMATION

| Ordering Number |                 | Package  | Pin Assignment |   | Packing   |
|-----------------|-----------------|----------|----------------|---|-----------|
| Lead Free       | Halogen Free    |          | 1              | 2 |           |
| 1N5401GL-Z21D-B | 1N5401GP-Z21D-B | DO-201AD | K              | A | Tape Box  |
| 1N5401GL-Z21D-R | 1N5401GP-Z21D-R | DO-201AD | K              | A | Tape Reel |

Note: Pin Assignment: A: Anode K: Cathode

|  |   |
|--|---|
| <p>1N5401GL-Z21D-R</p> <p>(1)Packing Type<br/>(2)Package Type<br/>(3)Lead Free</p> | <p>(1) R: Tape Reel, B: Tape Box<br/>(2) Z21D: DO-201AD<br/>(3) L: Lead Free, P: Halogen Free</p> |
|--|---|

#### 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   | $V_{RWM}$  | 100      | V    |
| Repetitive Peak Reverse Voltage  | $V_{RRM}$  | 100      | V    |
| RMS Voltage  | $V_{RMS}$  | 70       | V    |
| DC Blocking Voltage  | $V_{DC}$   | 100      | 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.

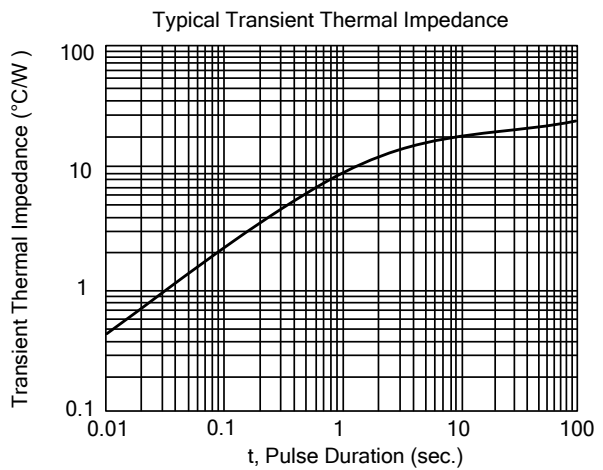
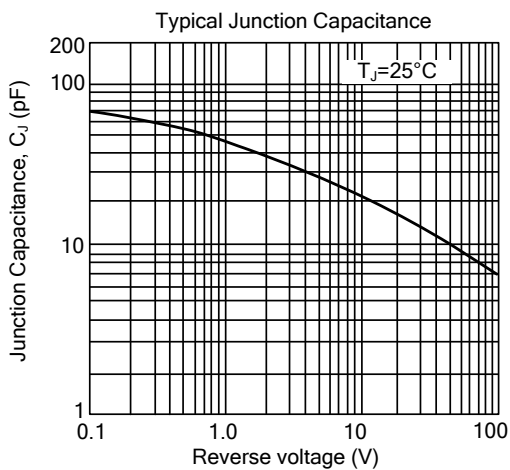
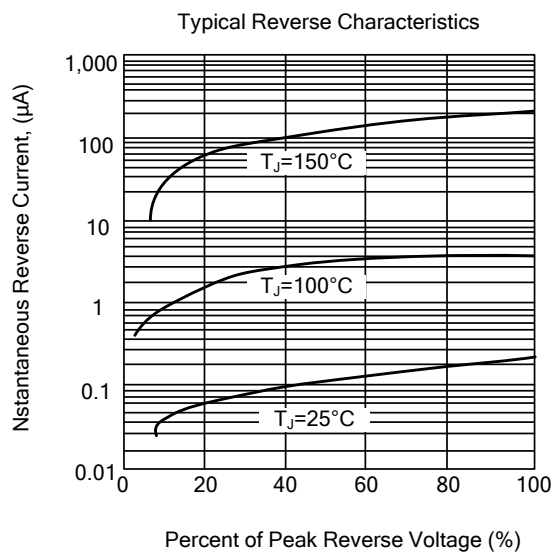
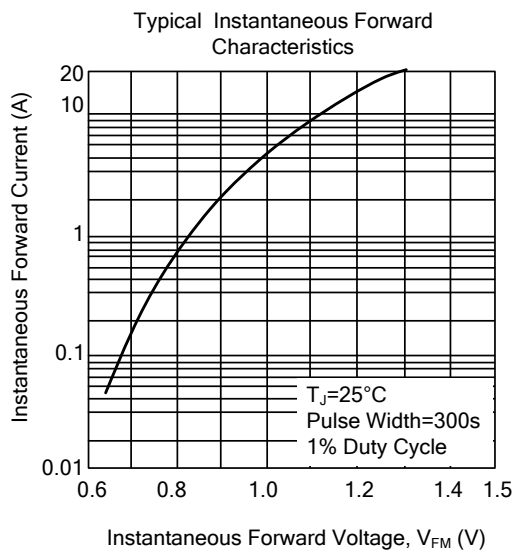
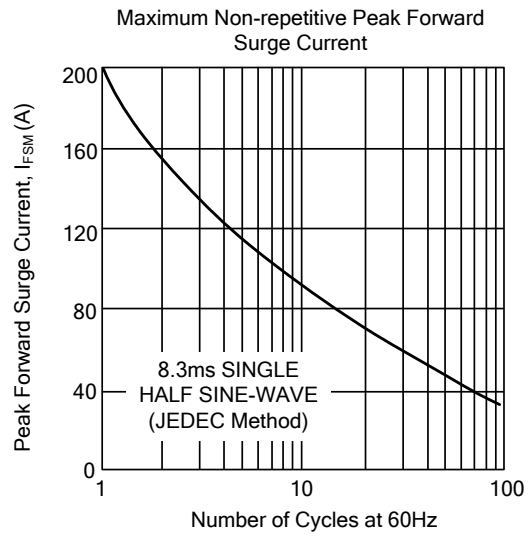
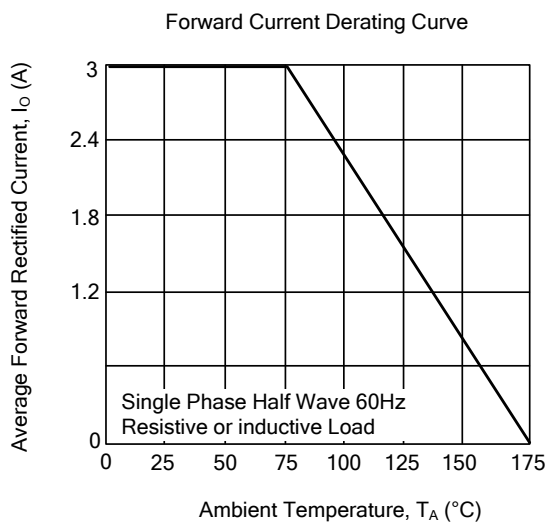
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| 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  |     | 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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