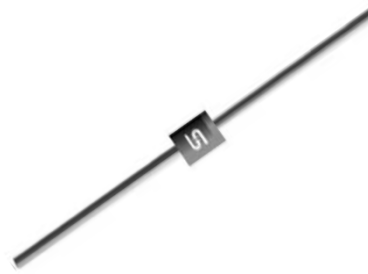


## Silicon Rectifiers

### FEATURES

- High efficiency, Low VF
- High current capability
- High surge current capability
- Low power loss
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



**DO-204AC (DO-15)**

### MECHANICAL DATA

**Case:** DO-204AC (DO-15)

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - green compound (halogen-free)

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

**Weight:** 0.4g (approximately)

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted) |                    |              |      |      |      |      |      |      |      |
|----------------------------------------------------------------------------------------------|--------------------|--------------|------|------|------|------|------|------|------|
| PARAMETER                                                                                    | SYMBOL             | 2A01         | 2A02 | 2A03 | 2A04 | 2A05 | 2A06 | 2A07 | UNIT |
| Maximum repetitive peak reverse voltage                                                      | V <sub>RRM</sub>   | 50           | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| Maximum RMS voltage                                                                          | V <sub>RMS</sub>   | 35           | 70   | 140  | 280  | 420  | 560  | 700  | V    |
| Maximum DC blocking voltage                                                                  | V <sub>DC</sub>    | 50           | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| Maximum average forward rectified current                                                    | I <sub>F(AV)</sub> | 2.0          |      |      |      |      |      |      | A    |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load          | I <sub>FSM</sub>   | 60           |      |      |      |      |      |      | A    |
| Maximum instantaneous forward voltage (Note 1)<br>@ 2 A                                      | V <sub>F</sub>     | 1.0          |      |      |      |      |      |      | V    |
| Maximum reverse current @ rated VR<br>T <sub>J</sub> =25 °C<br>T <sub>J</sub> =125 °C        | I <sub>R</sub>     | 5<br>50      |      |      |      |      |      |      | μA   |
| Typical junction capacitance (Note 2)                                                        | C <sub>j</sub>     | 20           |      |      |      |      |      |      | pF   |
| Typical thermal resistance                                                                   | R <sub>θJA</sub>   | 60           |      |      |      |      |      |      | °C/W |
| Operating junction temperature range                                                         | T <sub>J</sub>     | - 55 to +150 |      |      |      |      |      |      | °C   |
| Storage temperature range                                                                    | T <sub>STG</sub>   | - 55 to +150 |      |      |      |      |      |      | °C   |

Note 1: Pulse test with PW=300 μs, 1% duty cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

## ORDERING INFORMATION

| PART NO.         | PACKING CODE | GREEN COMPOUND CODE | PACKAGE | PACKING                |
|------------------|--------------|---------------------|---------|------------------------|
| 2A0x<br>(Note 1) | A0           | Suffix "G"          | DO-15   | 1,500 / Ammo box       |
|                  | R0           |                     | DO-15   | 3,500 / 13" Paper reel |
|                  | B0           |                     | DO-15   | 1,000 / Bulk packing   |

Note 1: "x" defines voltage from 50V (2A01) to 1000V (2A07)

## EXAMPLE

| PREFERRED P/N | PART NO. | PACKING CODE | GREEN COMPOUND CODE | DESCRIPTION    |
|---------------|----------|--------------|---------------------|----------------|
| 2A01 A0       | 2A01     | A0           |                     |                |
| 2A01 A0G      | 2A01     | A0           | G                   | Green compound |

## RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

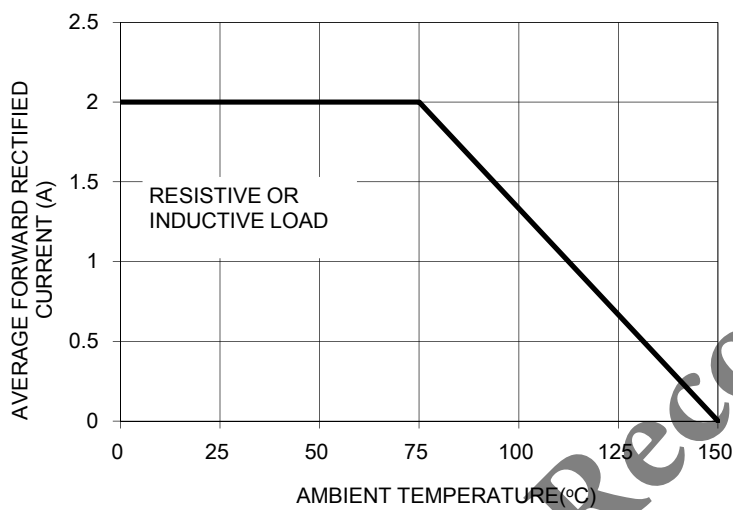


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

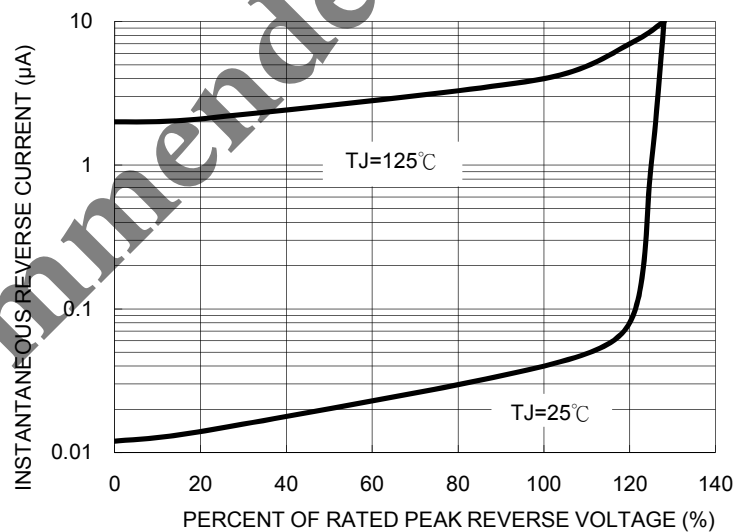


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

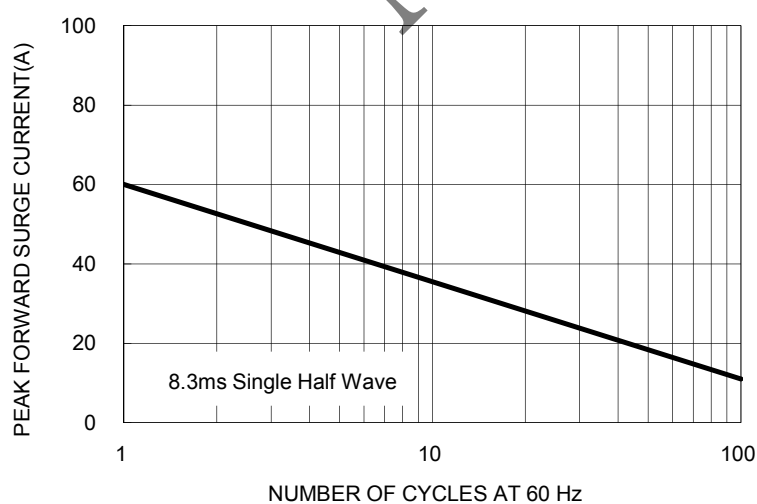


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

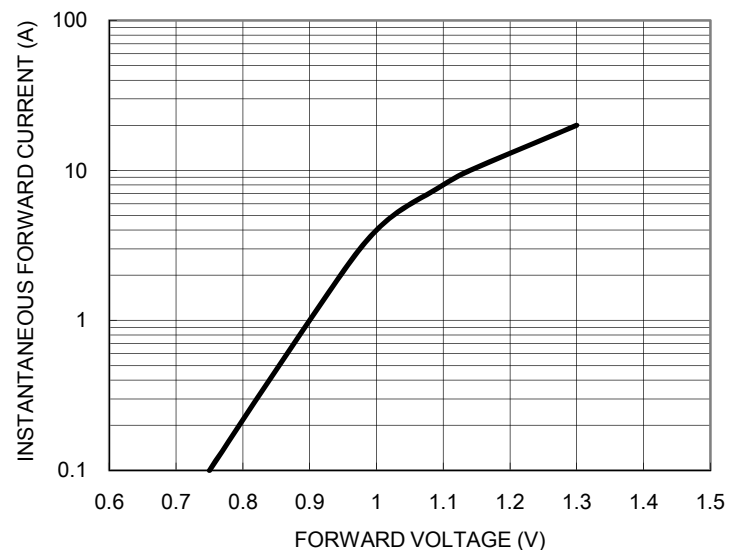
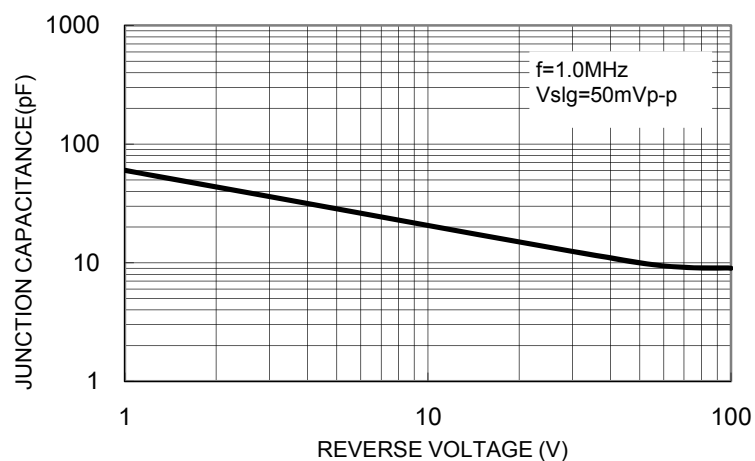
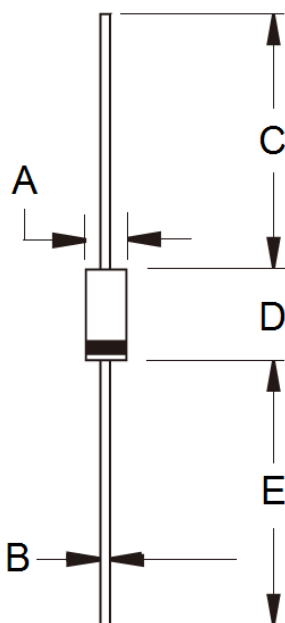


FIG. 5 TYPICAL JUNCTION CAPACITANCE



## PACKAGE OUTLINE DIMENSIONS



| DIM. | Unit (mm) |      | Unit (inch) |       |
|------|-----------|------|-------------|-------|
|      | Min       | Max  | Min         | Max   |
| A    | 2.60      | 3.60 | 0.102       | 0.142 |
| B    | 0.70      | 0.90 | 0.028       | 0.035 |
| C    | 25.40     | -    | 1.000       | -     |
| D    | 5.80      | 7.60 | 0.228       | 0.299 |
| E    | 25.40     | -    | 1.000       | -     |

## MARKING DIAGRAM



P/N = Specific Device Code  
G = Green Compound  
YWW = Date Code  
F = Factory Code

Not Recommended

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