

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



## MECHANICAL DATA

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

**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)

Base P/N with prefix "H" on packing code - AEC-Q101 qualified

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

Meet JESD 201 class 1A whisker test

with prefix "H" on packing code meet JESD 201 class 2 whisker test

**Weight:** 0.4g (approximately)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER   | SYMBOL             | SR 202       | SR 203 | SR 204 | SR 205       | SR 206 | SR 209 | SR 210 |
|---|--------------------|--------------|--------|--------|--------------|--------|--------|--------|
| Maximum repetitive peak reverse voltage   | V <sub>RRM</sub>   | 20           | 30     | 40     | 50           | 60     | 90     | 100    |
| Maximum RMS voltage   | V <sub>RMS</sub>   | 14           | 21     | 28     | 35           | 42     | 63     | 70     |
| Maximum DC blocking voltage   | V <sub>DC</sub>    | 20           | 30     | 40     | 50           | 60     | 90     | 100    |
| Maximum average forward rectified current   | I <sub>F(AV)</sub> | 2            |        |        |              |        |        |        |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load                             | I <sub>FSM</sub>   | 50           |        |        |              |        |        |        |
| Maximum instantaneous forward voltage (Note 1)<br>@ 2 A   | V <sub>F</sub>     | 0.55         |        |        | 0.70         |        | 0.85   |        |
| Maximum reverse current @ rated VR<br>T <sub>J</sub> =25 °C<br>T <sub>J</sub> =100 °C<br>T <sub>J</sub> =125 °C | I <sub>R</sub>     | 0.5          |        |        |              |        | 0      |        |
|   |                    | 10           |        |        | 5            |        |        |        |
|   |                    | -            |        |        | -            |        |        |        |
| Voltage rate of change (Rated V <sub>R</sub> )  | dV/dt              | 10000        |        |        |              |        |        |        |
| Typical thermal resistance  | R <sub>θJC</sub>   | 14           |        |        |              |        |        |        |
|   | R <sub>θJL</sub>   | 21.7         |        |        |              |        |        |        |
|   | R <sub>θJA</sub>   | 75           |        |        |              |        |        |        |
| Operating junction temperature range  | T <sub>J</sub>     | - 55 to +125 |        |        | - 55 to +150 |        |        |        |
| Storage temperature range   | T <sub>STG</sub>   | - 55 to +150 |        |        |              |        |        |        |

Note 1: Pulse test with  $PW=300\text{ }\mu\text{s}$ , 1% duty cycle

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## EXAMPLE

| PREFERRED P/N | PART NO. | AEC-Q101<br>QUALIFIED | PACKING CODE | GREEN COMPOUND<br>CODE | DESC  |
|---------------|----------|-----------------------|--------------|------------------------|-------|
| SR206 A0      | SR206    |                       | A0           |                        |       |
| SR206 A0G     | SR206    |                       | A0           | G                      | Green |
| SR206HA0      | SR206    | H                     | A0           |                        | AEC-Q |

## RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

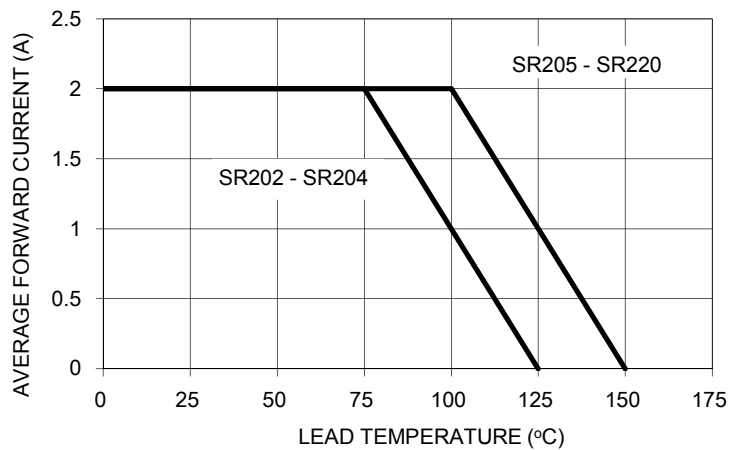


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

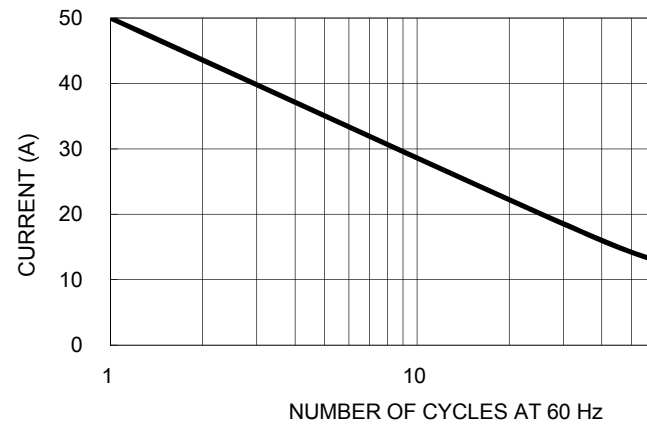


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

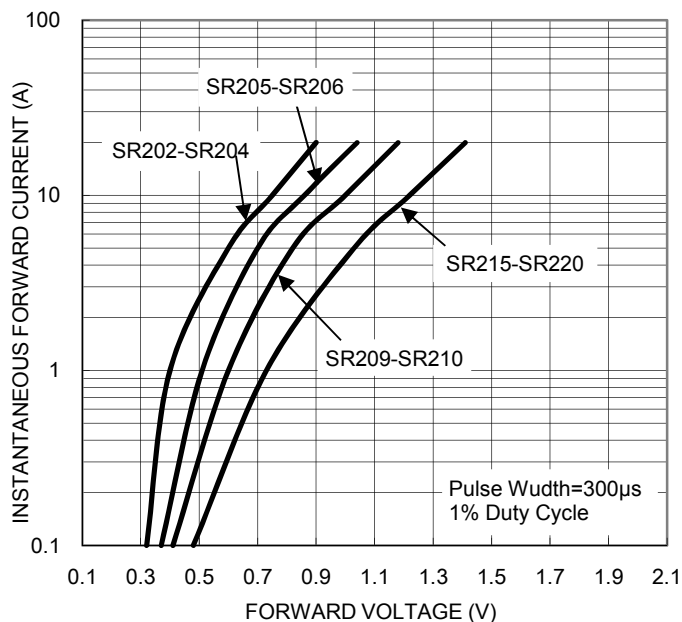
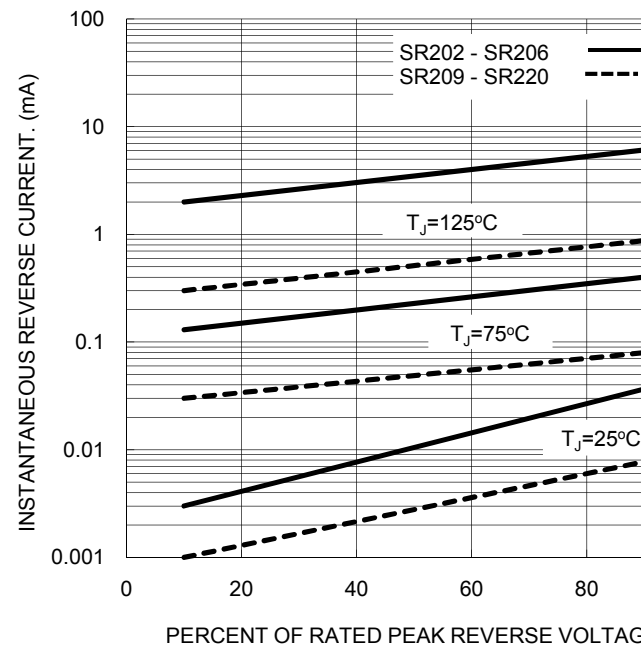
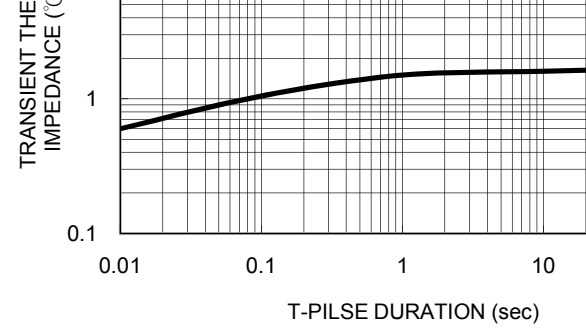
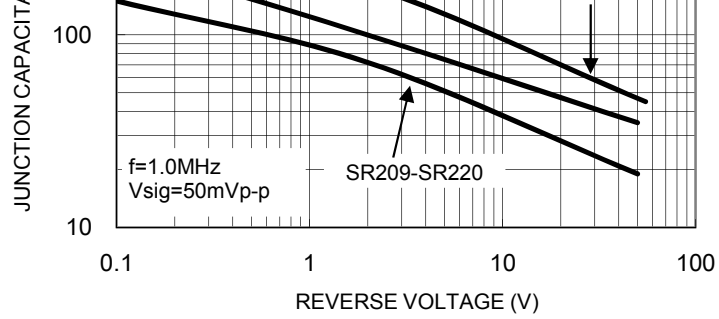


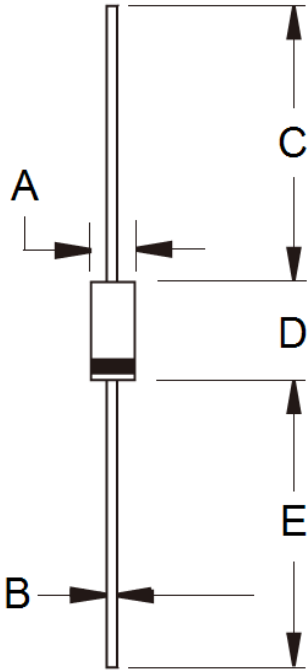
FIG. 4- TYPICAL REVERSE CHARACTERISTICS





## PACKAGE OUTLINE DIMENSIONS

### DO-204AC (DO-15)



| 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

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