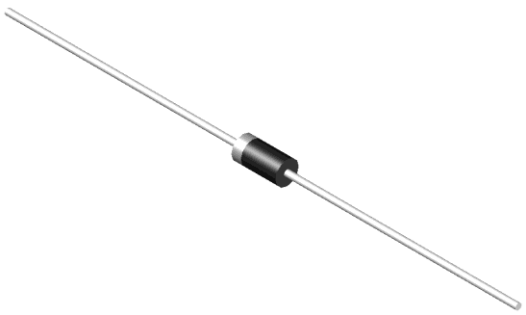
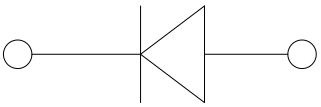
# General Purpose Rectifier





## Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

## Mechanical Data

- **Package**: DO-204AL(DO-41)

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

## ■Maximum Ratings (Ta=25℃ Unless otherwise specified）

| PARAMETER | SYMBOL | UNIT | 1N5391GS | 1N5392GS | 1N5393GS | 1N5395GS | 1N5397GS | 1N5398GS | 1N5399GS |
|---|---|---|---|---|---|---|---|---|---|
| Device marking code | | | 1N5391GS | 1N5392GS | 1N5393GS | 1N5395GS | 1N5397GS | 1N5398GS | 1N5399GS |
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average Forward Current @60Hz sine wave, Resistance load, Ta =75℃ | $I_{F(AV)}$ | A | 1.5 | | | | | | |
| Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Ta=25℃ | $I_{FSM}$ | A | 50 | | | | | | |
| Storage Temperature | $T_{stg}$ | ℃ | -55 ~+150 | | | | | | |
| Junction Temperature | Tj | ℃ | -55~+150 | | | | | | |

## ■Electrical Characteristics（$T_a$=25℃ Unless otherwise specified）

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | 1N5391GS | 1N5392GS | 1N5393GS | 1N5395GS | 1N5397GS | 1N5398GS | 1N5399GS |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum instantaneous forward voltage drop per diode | $V_{FM}$ | V | $I_{FM}$=1.5A | 1.1 | | | | | | |
| Maximum DC reverse current at rated DC blocking voltage per diode | $I_{RRM1}$ | μA | Ta=25℃ | 2.5 | | | | | | |
| | $I_{RRM2}$ | | Ta=100℃ | 50 | | | | | | |
| Typical junction capacitance | Cj | pF | Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C. | 15 | | | | | | |

## ■Thermal Characteristics （$T_a$=25℃ Unless otherwise specified）

| PARAMETER | SYMBOL | UNIT | 1N5391GS | 1N5392GS | 1N5393GS | 1N5395GS | 1N5397GS | 1N5398GS | 1N5399GS |
|---|---|---|---|---|---|---|---|---|---|
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | ℃/W | 55 | | | | | | |

## ■Ordering Information (Example)

| PREFERED P/N | PACKAGE CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---|---|---|---|---|---|---|
| 1N5391GS~1N5399GS | D1 | Approximate 0.30 | Approximate 5000 | 5000 | 50000 | Tape |
| 1N5391GS~1N5399GS | C1 | Approximate 0.30 | Approximate 1000 | 1000 | 50000 | Bulk |

## ■ Characteristics (Typical)

FIG.1: Io-Ta Curve

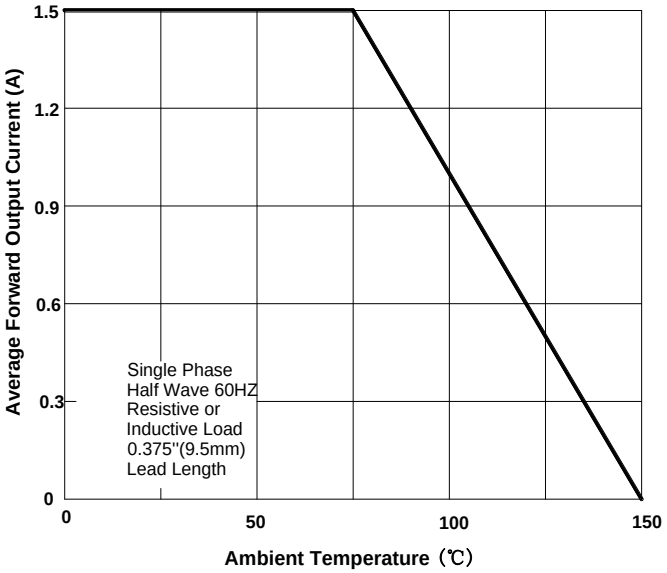



FIG.2: Forward Surge Current Capability

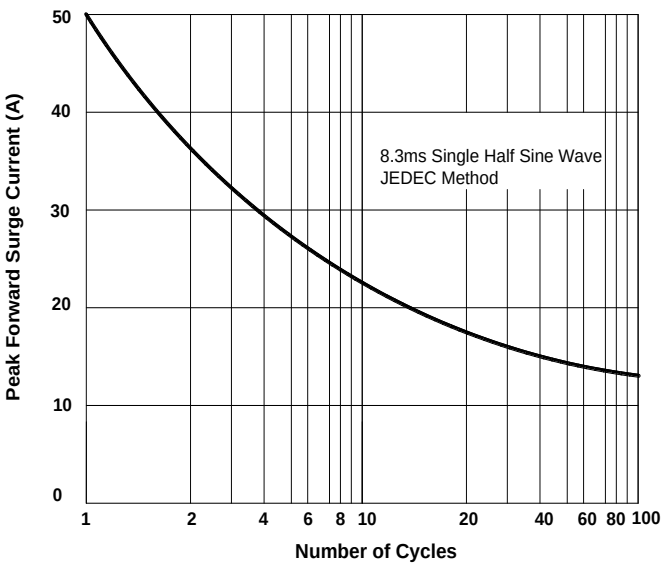



FIG.3: Forward Voltage

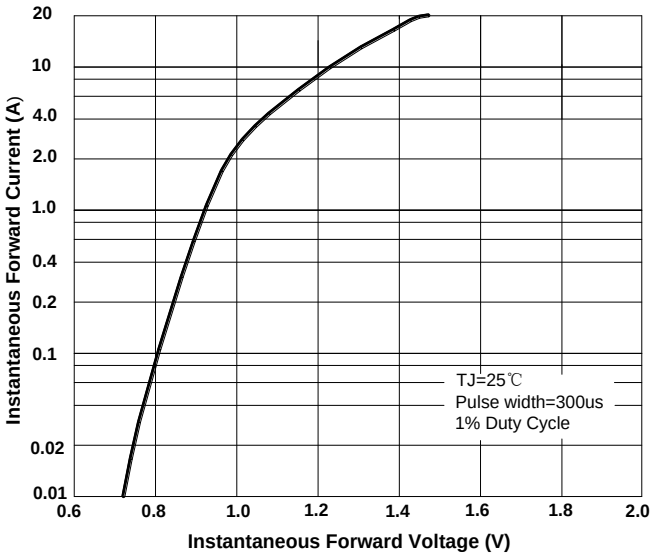
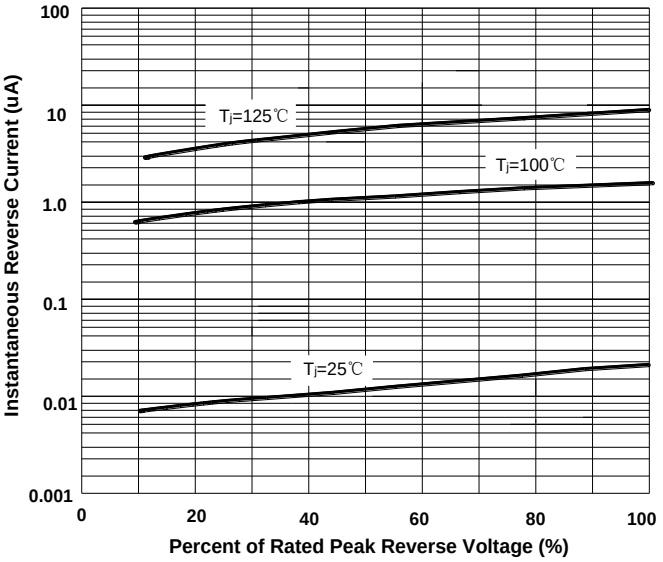
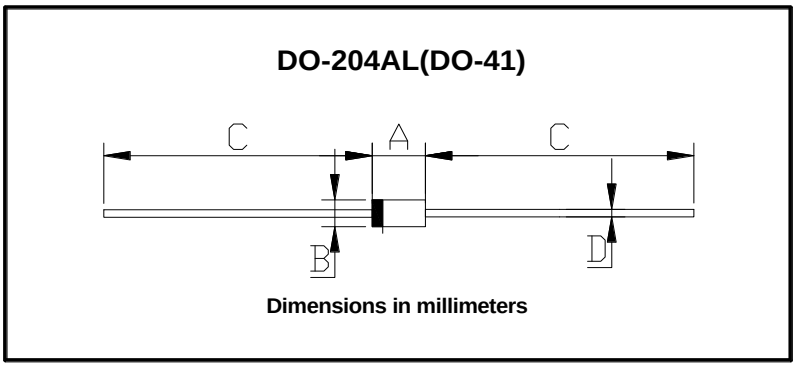



FIG.4: Typical Reverse Characteristics



## ■ Outline Dimensions




| DO-204AL(DO-41) | | |
|---|---|---|
| Dim | Min | Max |
| A | 4.22 | 5.21 |
| B | 2.03 | 2.72 |
| C | 25.4 | / |
| D | 0.69 | 0.86 |

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