

Multi Purpose Axial Leaded Glass Schottky Diodes

V2

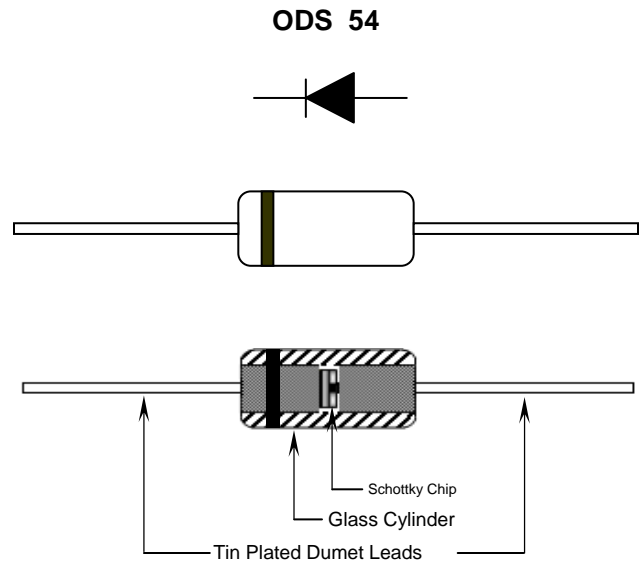
Features

- ◆ Glass Hermetically Sealed Packages
- ◆ Picosecond Switching
- ◆ Low Leakage Current
- ◆ Offered in Tape and Reel Packaging
- ◆ RoHS Compliant

Description and Applications

These Schottky diodes are designed to have picosecond switching speed and are housed in a hermetic axial lead glass package. These devices are designed for use in a variety of applications including mixing, detecting, and switching at both low and high power levels. They can also be used in commercial switching and control functions particularly in narrow band receivers. They can also be used in low frequency applications such as shaping, sampling, and as gates.

Glass Package Style



Absolute Maximum Ratings

T_{AMB} = +25°C (Unless Otherwise Noted) ¹

| Parameter | Absolute Maximum |
|---|----------------------|
| D.C. Reverse Voltage | (See Table) |
| Operating Temperature | -65°C to +200°C |
| Storage Temperature | -65°C to +200°C |
| Installation Temperature | +230°C for 5 Seconds |
| Power Dissipation Listed Below Will De-Rate Linearly to 0mW at 135°C | |
| Case Style 54 | 250mW |

Ordering Information

| Part Number | Package | Standard Quantity |
|--------------------|---------------|-------------------|
| MA4E2811 | ESD Bags | Bulk |
| MADS-002811-00540T | Tape and Reel | 1500 |
| MA4E2812-54 | ESD Bags | Bulk |

Notes

1. Operation of this device above any one of these parameters may cause permanent damage.

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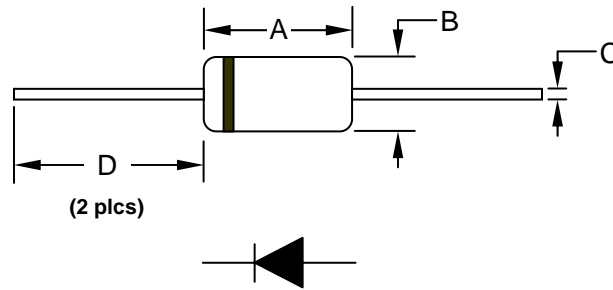
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Diode Specifications *

| Part Number | Package Style | Voltage Breakdown @ 10uA Vb (min.) | Forward Voltage @ 1mA Vf (max.) | Forward Voltage @ 20mA Vf (max.) | Forward Voltage @ 35mA Vf (max.) | Reverse Leakage Current @ 8 V Ir (max.) | Reverse Leakage Current @ 15 V Ir (max.) | Capacitance @ 0V, F=1MHz Ct (max.) |
|--------------------------------|---------------|---------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|--|---|---------------------------------------|
| MADS-002811-00540T MA4E2811 | 54 | 15 V | 410 mV | 1.0 V | - | 100 nA | - | 1.2 pF |
| MA4E2812-54 | 54 | 20 V | 550 mV | - | 1.0 V | - | 150nA | 1.2 pF |

Package Outline Dimensions



| Package Style | Dimension A | | Dimension B | | Dimension C | | Dimension D (Min.) | |
|---------------|-------------|------------|-------------|-----------|-------------|-----------|--------------------|------|
| | Mils | mm | Mils | mm | Mils | mm | Mils | mm |
| 54 | 155 ± 10 | 3.94 ± .25 | 71 ± 3 | 1.8 ± .08 | 15 ± 1 | .38 ± .03 | 1000 | 25.4 |

Assembly Recommendations

- Leads on axial leaded devices must be formed while being held firm. Bending the leads too close to the body of the part may cause internal damage to the device. Bends <0.060" from body are not recommended. Appropriate fixturing should be used.
- Devices may be soldered using standard 60/40, Sn/Pb or RoHS compliant solders. Axial leads are tin plated, 50µM, thick to ensure an optimum connection.

* Specifications subject to change without notice.

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