

Vishay Semiconductors

Small Signal Schottky Diode



LINKS TO ADDITIONAL RESOURCES



MECHANICAL DATA

Case: QuadroMELF (SOD-80) Weight: approx. 34 mg

Cathode band color: black

Packaging codes/options:

GS18/10K per 13" reel (8 mm tape), 10K/box GS08/2.5K per 7" reel (8 mm tape), 12.5K/box

| PARTS TABLE | | | | | |
|-------------|----------------------------|-----------------------|--------------|---------------|--|
| PART | ORDERING CODE | CIRCUIT CONFIGURATION | TYPE MARKING | REMARKS | |
| BAS286 | BAS286-GS18 or BAS286-GS08 | Single | - | Tape and reel | |

| ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified) | | | | | |
|---|------------------------|------------------|-------|------|--|
| PARAMETER | TEST CONDITION | SYMBOL | VALUE | UNIT | |
| Reverse voltage | | V _R | 50 | V | |
| Peak forward surge current | t _p = 10 ms | I _{FSM} | 5 | A | |
| Repetitive peak forward current | t _p ≤ 1 s | I _{FRM} | 500 | mA | |
| Forward continuous current | | I _F | 200 | mA | |
| Average forward current | | I _{FAV} | 200 | mA | |

| THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified) | | | | | |
|---|---------------------------------------|-------------------|-------------|------|--|
| PARAMETER | TEST CONDITION | SYMBOL | VALUE | UNIT | |
| Thermal resistance junction to ambient air | On PC board 50 mm x 50 mm x 1.6 mm | R _{thJA} | 320 | K/W | |
| Junction temperature | | Tj | 125 | °C | |
| Storage temperature range | | T _{stg} | -65 to +150 | ٦° | |

| ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified) | | | | | | |
|---|---------------------------------|----------------|------|------|------|------|
| PARAMETER | TEST CONDITION | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| | I _F = 0.1mA | V _F | | | 300 | mV |
| | I _F = 1 mA | V _F | | | 380 | mV |
| Forward voltage | I _F = 10 mA | V _F | | | 450 | mV |
| | I _F = 30 mA | V _F | | | 600 | mV |
| | I _F = 100 mA | V _F | | | 900 | mV |
| Reserve current | V _R = 40 V | I _R | | | 5 | μA |
| Diode capacitance | V _R = 1 V, f = 1 MHz | CD | | | 8 | pF |

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FEATURES

- Integrated protection ring against static discharge
- Very low forward voltage
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

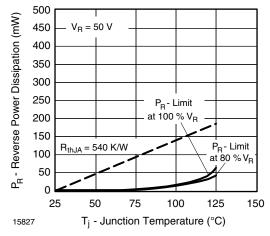
APPLICATIONS

· Applications where a very low forward voltage is required



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TYPICAL CHARACTERISTICS ($T_{amb} = 25 \text{ °C}$, unless otherwise specified)





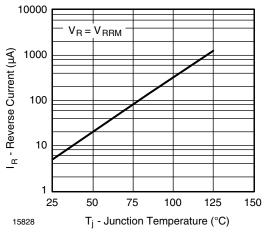
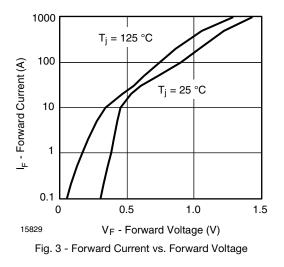
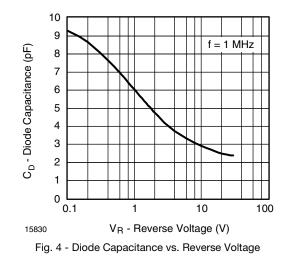


Fig. 2 - Reverse Current vs. Junction Temperature





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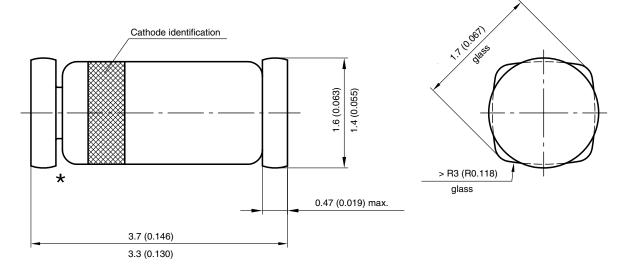
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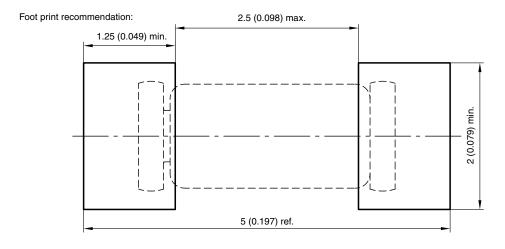


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PACKAGE DIMENSIONS in millimeters (inches): QuadroMELF (SOD-80)



★ The gap between plug and glass can be either on cathode or anode side



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