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[BAS286-GS18](#)

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www.vishay.com

BAS286

Vishay Semiconductors

Small Signal Schottky Diode



FEATURES

- Integrated protection ring against static discharge
- Very low forward voltage
- AEC-Q101 qualified
- Material categorization:
For definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT

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

APPLICATIONS

- Applications where a very low forward voltage is required

| PARTS TABLE | | | | |
|-------------|----------------------------|-----------------------|--------------|---------------|
| PART | ORDERING CODE | INTERNAL CONSTRUCTION | TYPE MARKING | REMARKS |
| BAS286 | BAS286-GS18 or BAS286-GS08 | Single diode | - | 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 | | T _j | 125 | °C |
| Storage temperature range | | T _{stg} | - 65 to + 150 | °C |

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

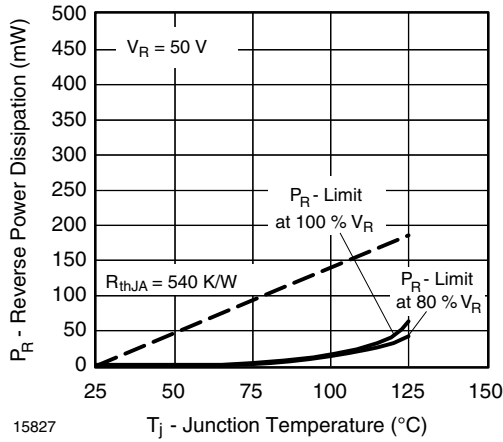


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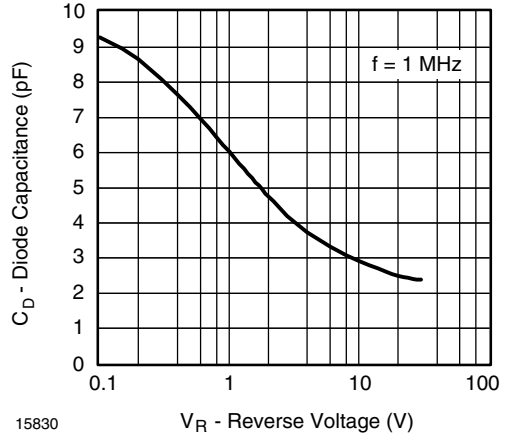
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TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)



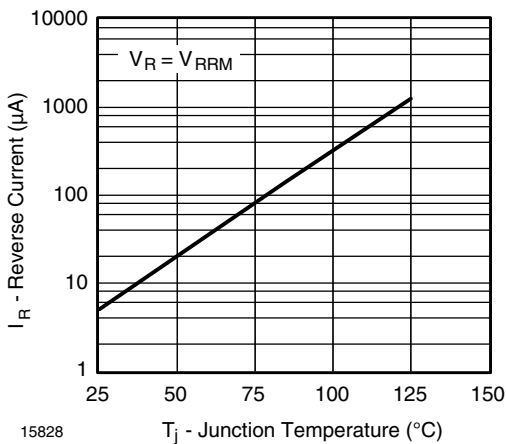
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Fig. 1 - Max. Reverse Power Dissipation vs. Junction Temperature



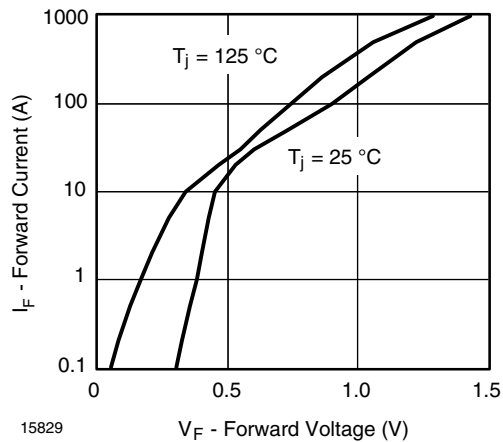
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Fig. 4 - Diode Capacitance vs. Reverse Voltage



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Fig. 2 - Reverse Current vs. Junction Temperature



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Fig. 3 - Forward Current vs. Forward Voltage

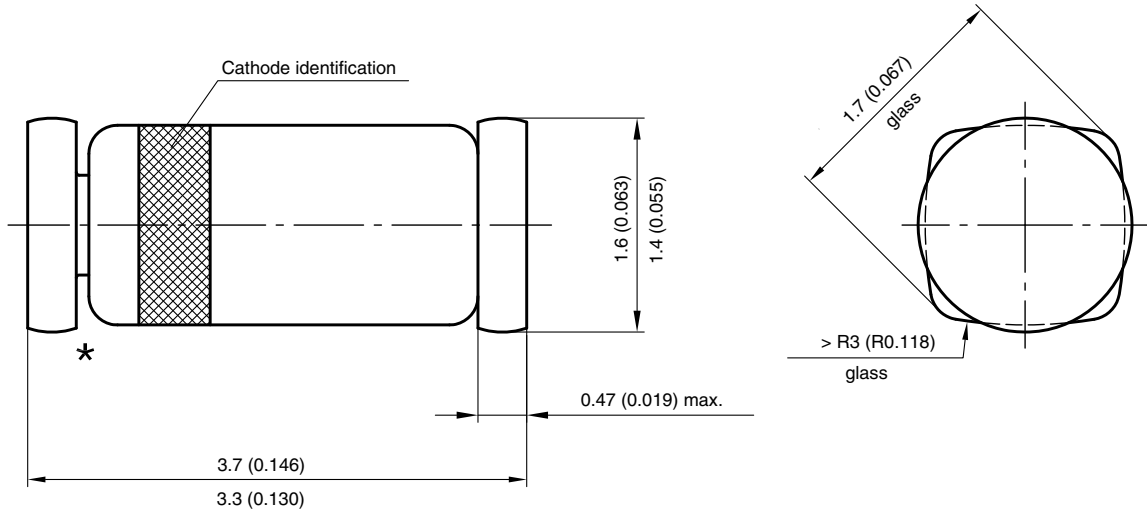


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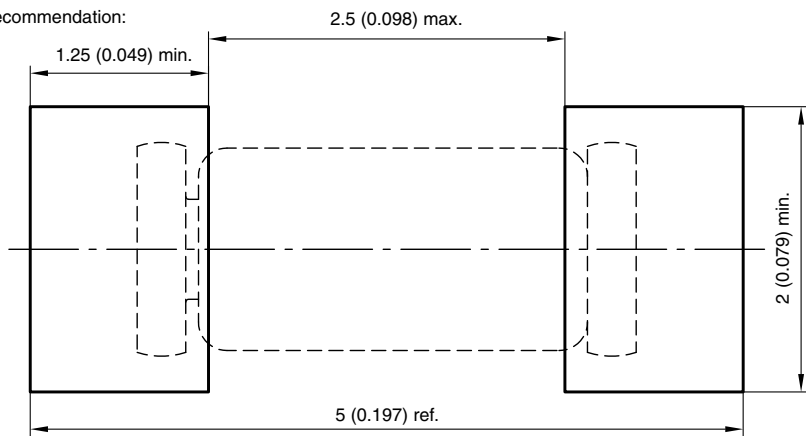
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PACKAGE DIMENSIONS in millimeters (inches): **QuadroMELF SOD-80**



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

Foot print recommendation:



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 96 12071



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