

ABAS16WS-HF

RoHS Device
Halogen Free

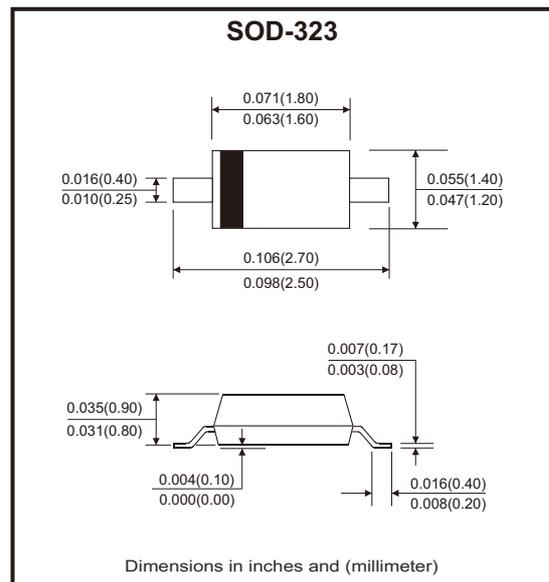


Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- VRRM 100V.
- IFAV 200mA.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOD-323, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.
- Polarity: Cathode line denotes the cathode end.



Circuit Diagram



Maximum Rating (at Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|--|--------|-------------|------|
| Repetitive peak reverse voltage | VRRM | 100 | V |
| Average forward current | IFAV | 200 | mA |
| Peak forward surge current tp = 1ms | IFSM | 1 | A |
| Power dissipation | Ptot | 200 | mW |
| Thermal resistance junction to ambient air | RθJA | 635 | K/W |
| Maximum junction temperature | TJ | 150 | °C |
| Storage temperature range | TSTG | -55 to +150 | °C |

Electrical Characteristics (at Ta=25°C unless otherwise noted)

| Parameter | Symbol | Conditions | Min | Max | Unit |
|---------------------------|-----------------|---|-----|-------|------|
| Forward voltage | V _{F1} | I _F = 1mA | | 0.715 | V |
| | V _{F2} | I _F = 10mA | | 0.855 | |
| | V _{F3} | I _F = 50mA | | 1.0 | |
| | V _{F4} | I _F = 150mA | | 1.25 | |
| Reverse current | I _R | V _R = 75V | | 1.0 | μA |
| Reverse breakdown voltage | V _{BR} | I _R = 100μA | 100 | | V |
| Diode capacitance | C _D | V _R = V _F = 0V, f = 1MHz | | 4 | pF |
| Reverse recovery time | t _{rr} | I _F = I _R = 10mA, I _{rr} = 0.1I _R , R _L = 100Ω | | 6 | nS |

Rating and Characteristic Curves (ABAS16WS-HF)

Fig.1 - Power Dissipation Characteristics

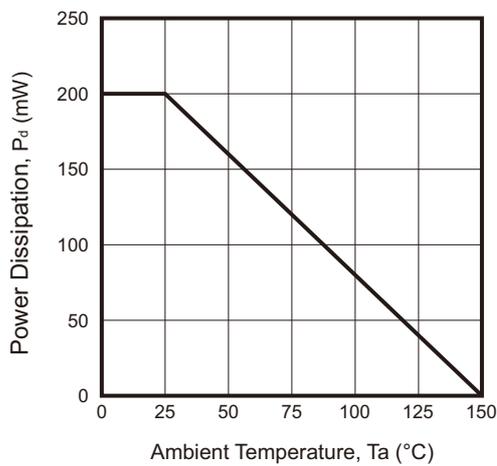


Fig.2 - Capacitance Characteristics

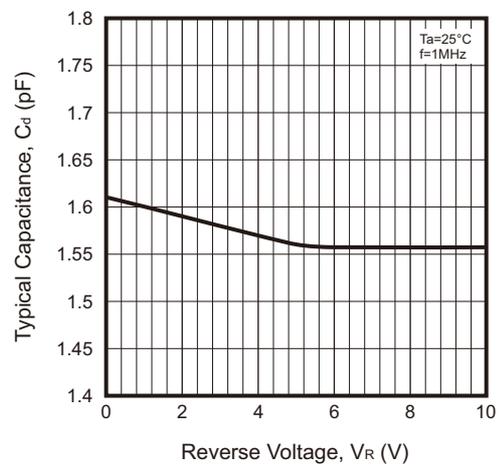


Fig.3 - Forward Characteristics

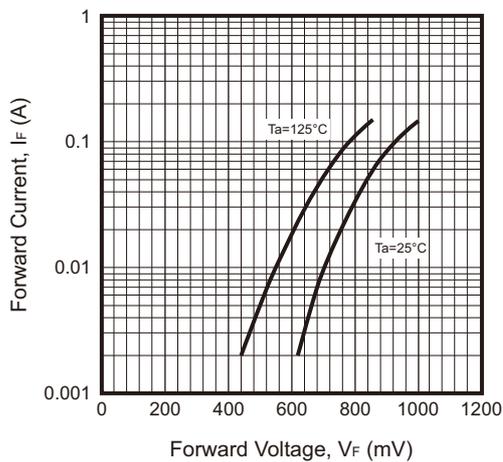
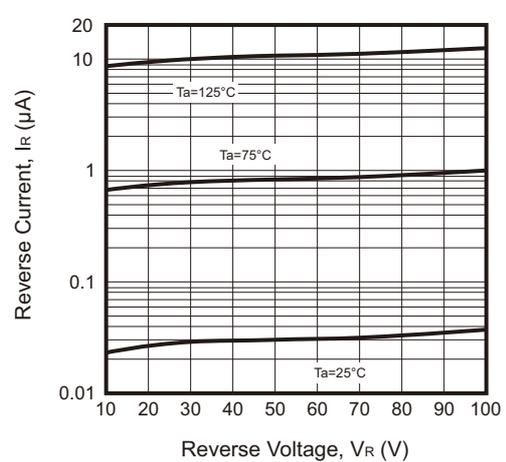


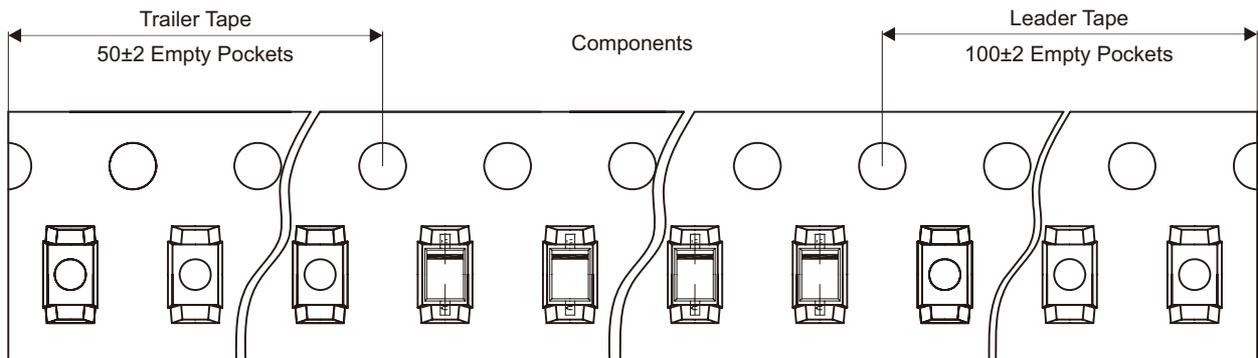
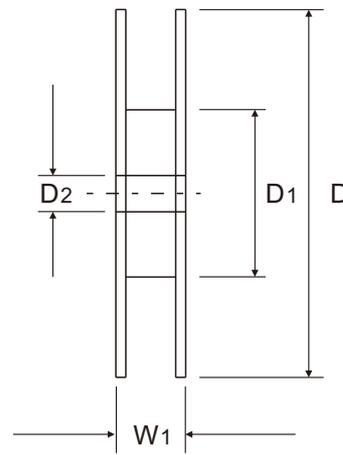
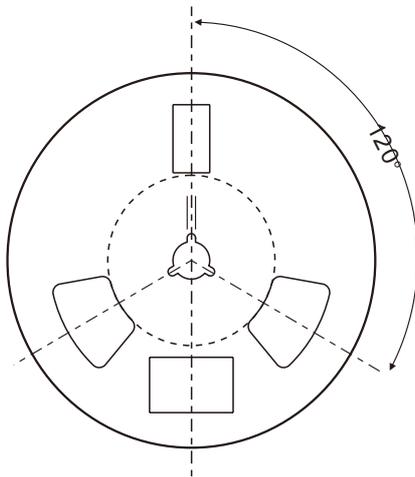
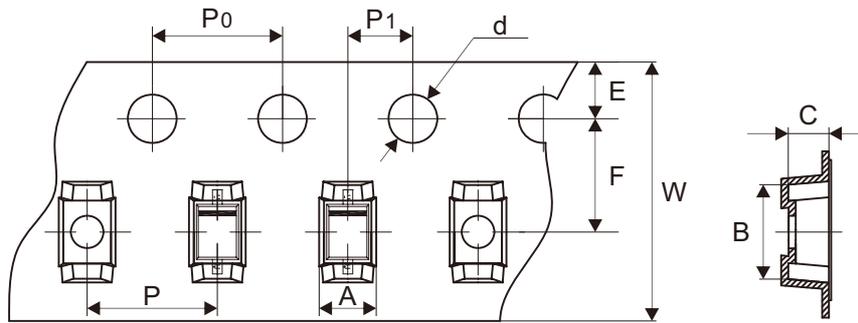
Fig.4 - Reverse Characteristics



Company reserves the right to improve product design, functions and reliability without notice.

REV:A

Reel Taping Specification



| SOD-323 | SYMBOL | A | B | C | d | D | D1 | D2 |
|---------|--------|---------------|---------------|---------------|--------------------------|---------------|---------------|---------------|
| | (mm) | 1.46 ± 0.10 | 2.90 ± 0.10 | 1.25 ± 0.10 | 1.50 + 0.10 - 0.00 | 178.00 ± 1.00 | 54.60 ± 0.20 | 13.30 ± 0.20 |
| | (inch) | 0.057 ± 0.004 | 0.114 ± 0.004 | 0.049 ± 0.004 | 0.059 + 0.004 - 0.000 | 7.008 ± 0.039 | 2.150 ± 0.008 | 0.524 ± 0.008 |

| SOD-323 | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|---------|--------|---------------|---------------|---------------|---------------|---------------|--------------------------|---------------|
| | (mm) | 1.75 ± 0.10 | 3.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 8.00 + 0.30 - 0.10 | 9.60 ± 0.20 |
| | (inch) | 0.069 ± 0.004 | 0.138 ± 0.002 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.315 + 0.012 - 0.004 | 0.378 ± 0.008 |

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REV:A

Marking Code

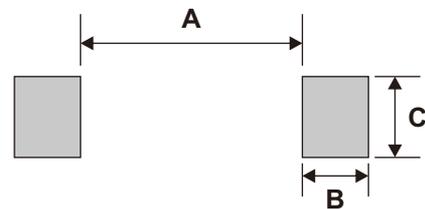
| Part Number | Marking Code |
|-------------|--------------|
| ABAS16WS-HF | T4. |



█ = Cathode band

Suggested PAD Layout

| SIZE | SOD-323 | |
|------|---------|--------|
| | (mm) | (inch) |
| A | 1.88 | 0.074 |
| B | 0.56 | 0.022 |
| C | 0.69 | 0.027 |



Note: 1. The pad layout is for reference purposes only.

Standard Packaging

| Case Type | REEL PACK | |
|-----------|------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| SOD-323 | 3,000 | 7 |