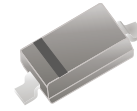


ARB551V-30-HF

RoHS Device
Halogen Free

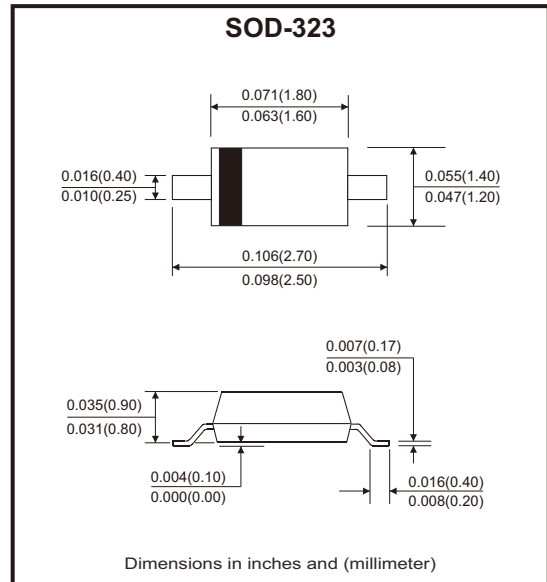


Features

- Low voltage.
- Low inductance.
- For power supply.
- 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 |
|---|-----------------|-------------|------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 30 | V |
| DC blocking voltage | V_R | 20 | V |
| Average forward current | $I_{F(AV)}$ | 0.5 | A |
| Peak forward surge current (60Hz half-sine wave · 1cyc) | I_{FSM} | 2 | A |
| Power dissipation | P_{tot} | 200 | mW |
| Thermal resistance junction to ambient | $R_{\theta JA}$ | 500 | K/W |
| Maximum junction temperature | T_J | 125 | °C |
| Storage temperature range | T_{STG} | -55 to +150 | °C |

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

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|--------|------------------------------|-----|-----|--------------|------|
| Forward voltage | V_F | $I_F = 0.1A$ $I_F = 0.5A$ | | | 0.37 0.47 | V |
| Reverse leakage current | I_R | $V_R = 20V$ | | | 100 | μA |

Rating and Characteristic Curves (ARB551V-30-HF)

Fig.1 - Forward Characteristics

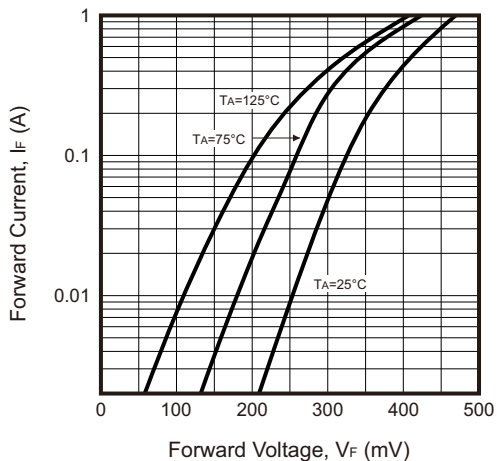


Fig.2 - Reverse Characteristics

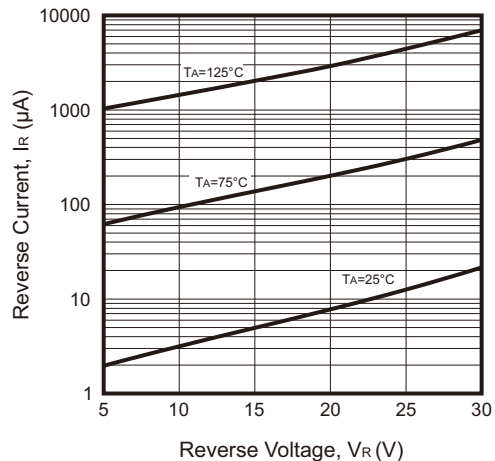
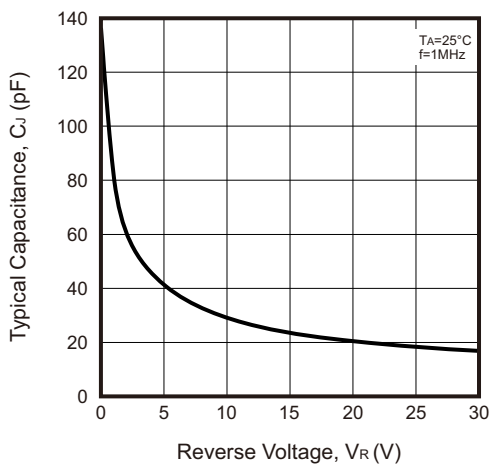
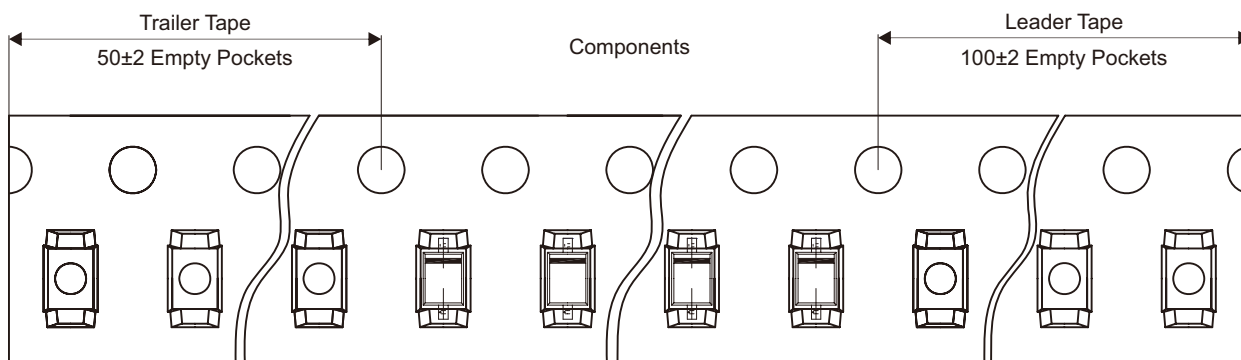
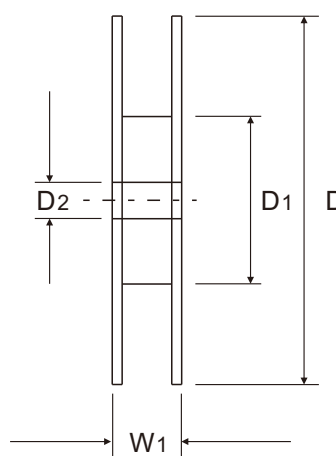
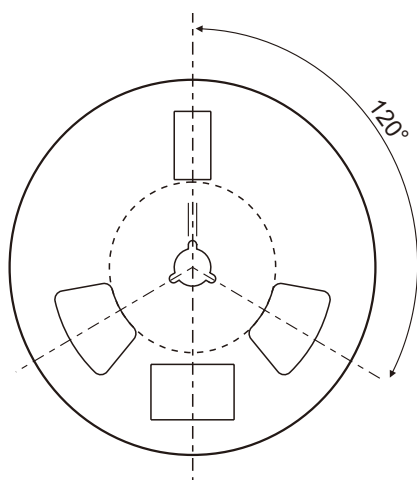
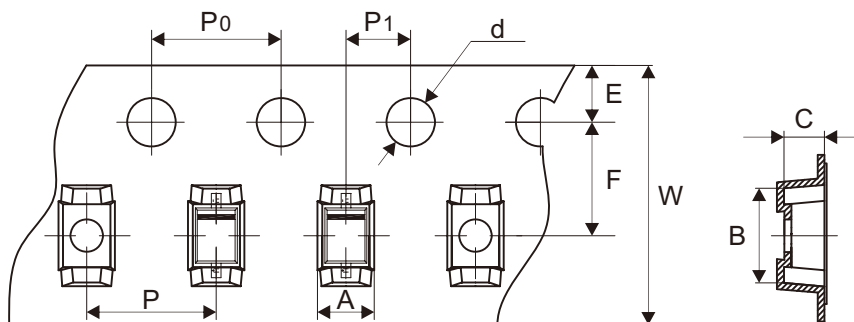


Fig.3 - Capacitance Characteristics



Reel Taping Specification



| SOD-323 | SYMBOL | A | B | C | d | D | D1 | D2 |
|---------|--------|---------------|---------------|---------------|--------------------------|---------------|---------------|---------------|
| | (mm) | 1.50 ± 0.05 | 2.90 ± 0.10 | 1.25 ± 0.10 | 1.50 + 0.10 - 0.00 | 178.00 ± 2.00 | 54.40 ± 1.00 | 13.00 ± 1.00 |
| | (inch) | 0.059 ± 0.002 | 0.114 ± 0.004 | 0.049 ± 0.004 | 0.059 + 0.004 - 0.000 | 7.008 ± 0.079 | 2.142 ± 0.039 | 0.512 ± 0.039 |

| 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 | 12.30 ± 1.00 |
| | (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 | 0.484 ± 0.039 |