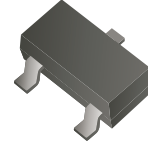


ABAS70-xx-HF Series

RoHS Device
Halogen Free



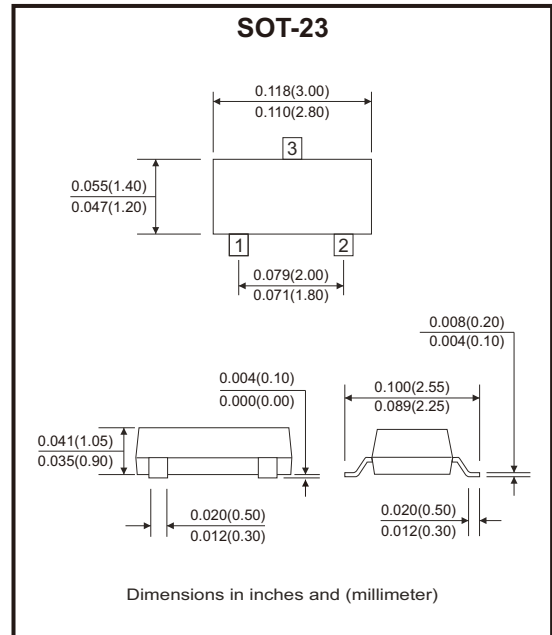
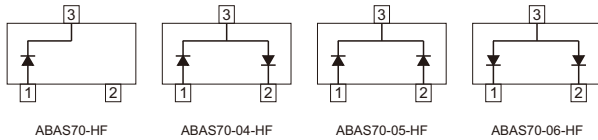
Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- Low forward voltage schottky rectifier.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.

Circuit Diagram



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

| Parameter | Symbol | Value | Unit |
|---|-----------------|-------------|------|
| Continuous reverse voltage | V_R | 70 | V |
| Average forward current | I_{FAV} | 70 | mA |
| Non-repetitive peak forward surge current $t=8.3ms$ | I_{FSM} | 100 | mA |
| Power dissipation | P_D | 200 | mW |
| Thermal resistance junction to ambient | $R_{\theta JA}$ | 500 | °C/W |
| Junction temperature range | T_J | -55 to +150 | °C |
| Storage temperature range | T_{STG} | -55 to +150 | °C |

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

| Parameter | Symbol | Conditions | Min | Max | Unit |
|---------------------------|-------------|---|-----|------|---------|
| Reverse breakdown voltage | $V_{(BR)R}$ | $I_R = 10\mu A$ | 70 | | V |
| Forward voltage | V_F | $I_F = 1mA$ | | 0.41 | V |
| | | $I_F = 15mA$ | | 1.0 | |
| Reverse current | I_R | $V_R = 50V$ | | 0.2 | μA |
| Junction capacitance | C_J | $V_R = 0V, f = 1MHz$ | | 4 | pF |
| Reverse recovery time | t_{rr} | $I_F = I_R = 10mA, I_{rr} = 1mA, R_L = 100\Omega$ | | 5 | ns |

Rating and Characteristic Curves (ABAS70-xx-HF)

Fig.1 - Forward Characteristics

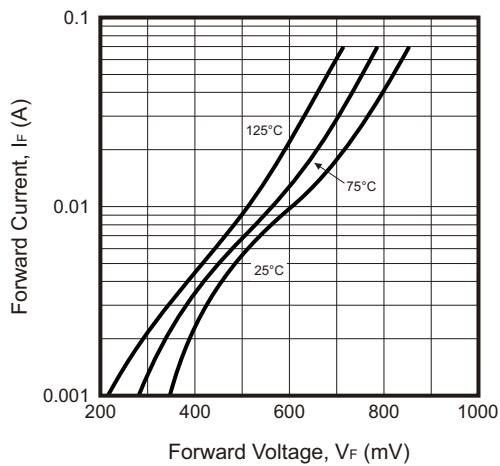


Fig.2 - Reverse Characteristics

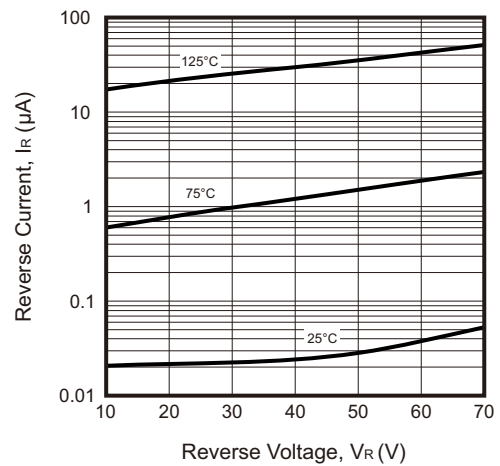
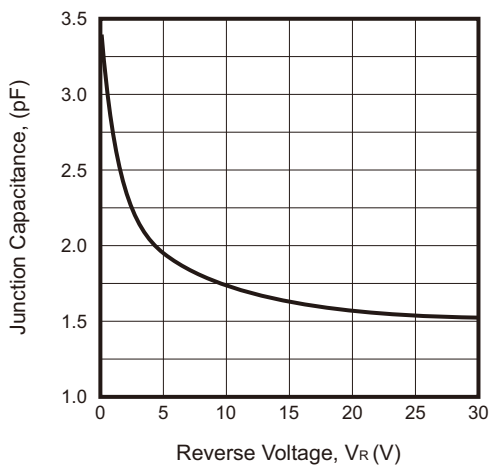


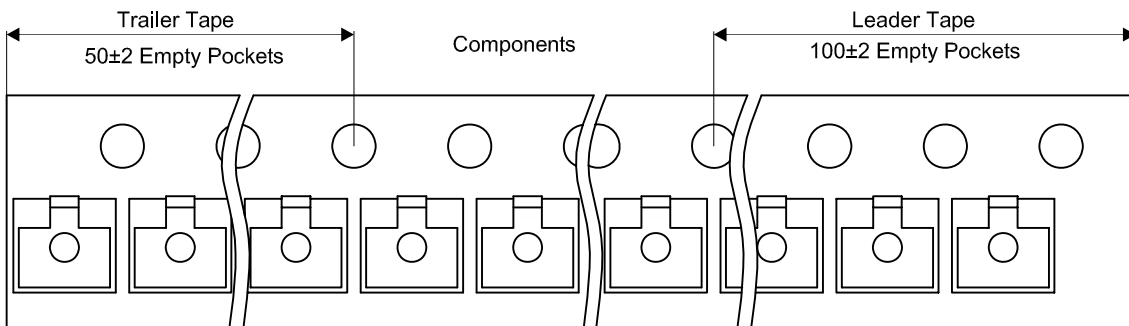
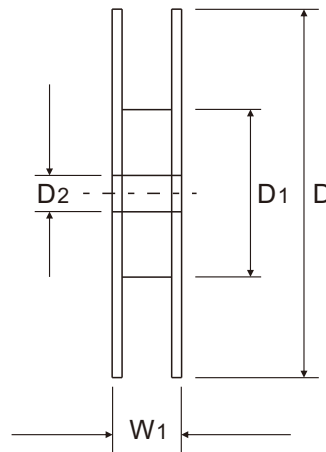
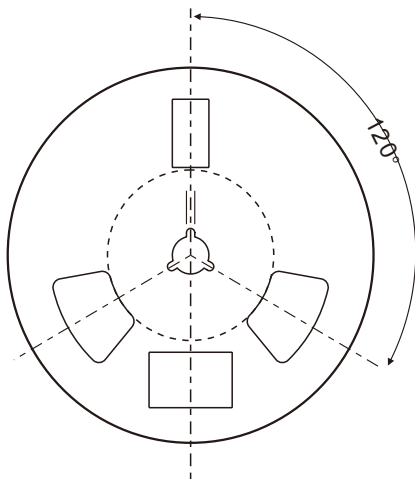
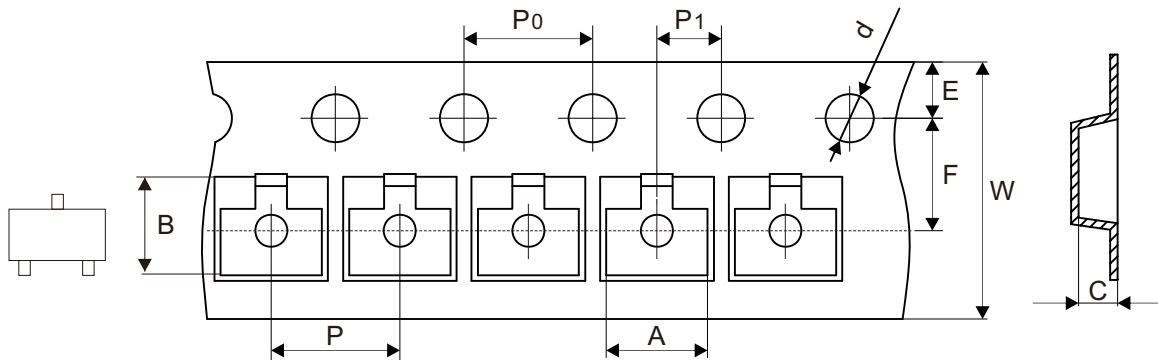
Fig.3 - Junction Capacitance



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

REV:B

Reel Taping Specification



| SOT-23 | SYMBOL | A | B | C | d | D | D1 | D2 |
|--------|--------|---------------|---------------|---------------|--------------------------|---------------|---------------|---------------|
| | (mm) | 3.15 ± 0.10 | 2.77 ± 0.10 | 1.22 ± 0.10 | 1.50 + 0.10 - 0.00 | 178.00 ± 1.00 | 54.60 ± 1.00 | 13.30 ± 1.00 |
| | (inch) | 0.124 ± 0.004 | 0.109 ± 0.004 | 0.048 ± 0.004 | 0.059 + 0.004 - 0.000 | 7.008 ± 0.039 | 2.150 ± 0.039 | 0.524 ± 0.039 |

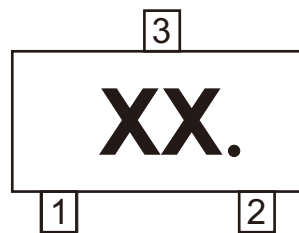
| SOT-23 | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|--------|--------|---------------|---------------|---------------|---------------|---------------|--------------------------|---------------|
| | (mm) | 1.75 ± 0.10 | 3.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 8.00 + 0.30 - 0.10 | 11.10 ± 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 | 0.437 ± 0.008 |

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

REV:B

Marking Code

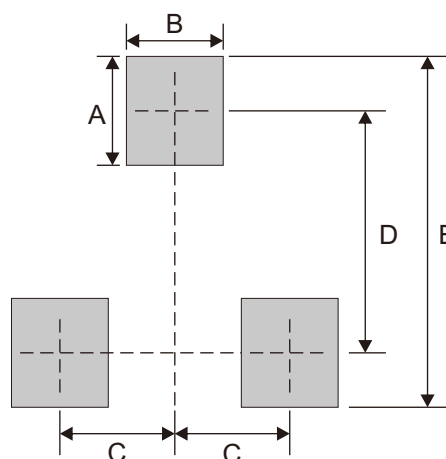
| Part Number | Marking Code |
|--------------|--------------|
| ABAS70-HF | 73. |
| ABAS70-04-HF | 74. |
| ABAS70-05-HF | 75. |
| ABAS70-06-HF | 76. |



xx = Product type marking code

Suggested P.C.B. PAD Layout

| SIZE | SOT-23 | |
|------|--------|--------|
| | (mm) | (inch) |
| A | 0.90 | 0.035 |
| B | 0.80 | 0.031 |
| C | 0.95 | 0.037 |
| D | 2.00 | 0.079 |
| E | 2.90 | 0.114 |



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

Standard Packaging

| Case Type | REEL PACK | |
|-----------|------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| SOT-23 | 3,000 | 7 |