



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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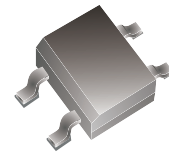
ABS05-HF Thru. ABS10-HF

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 A

RoHS Device

Halogen Free



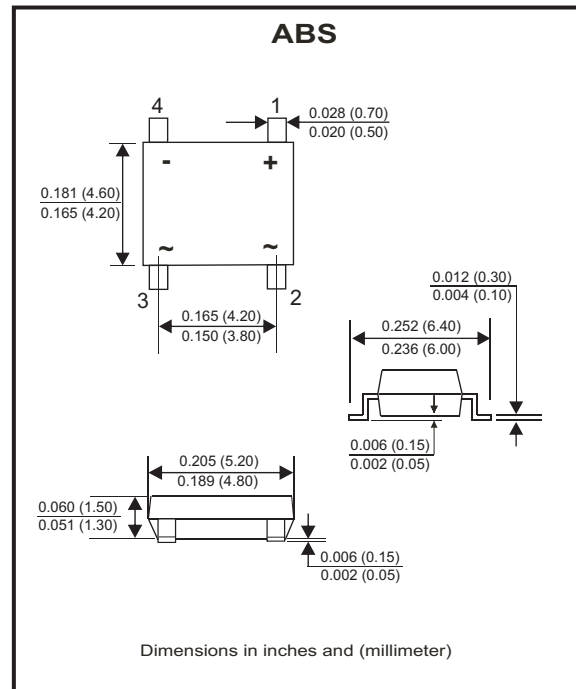
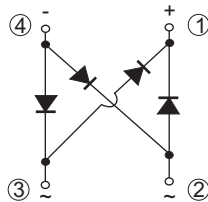
Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Lead tin plated copper.
- UL recognized file # E217139

Mechanical data

- Polarity: Symbol molded on body.
- Mounting position: Any.
- Weight: 0.08 grams.

Circuit Diagram



Maximum Rating And Electrical Characteristics

Rating at $T_A=25^{\circ}\text{C}$, unless otherwise noted.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| Parameter | Symbol | ABS05-HF | ABS1-HF | ABS2-HF | ABS4-HF | ABS6-HF | ABS8-HF | ABS10-HF | Unit |
|--|-----------------|-------------|---------|---------|---------|---------|---------|----------|----------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current (Note 1) @ $T_A=40^{\circ}\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Super Imposed on Rated Load (JEDEC Method) | I_{FSM} | 30 | | | | | | | A |
| Maximum Forward Voltage at 1.0A DC | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_J=125^{\circ}\text{C}$ | I_R | 5.0 500 | | | | | | | μA |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 80 | | | | | | | $^{\circ}\text{C/W}$ |
| Typical Thermal Resistance | $R_{\theta JC}$ | 12 | | | | | | | $^{\circ}\text{C/W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^{\circ}\text{C}$ |

Notes: 1. Mounted on P.C.Board.
 2. Thermal resistance junction to ambient.

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

RATING AND CHARACTERISTIC CURVES (ABS05-HF thru ABS10-HF)

Fig.1 - Forward Current Derating Curve

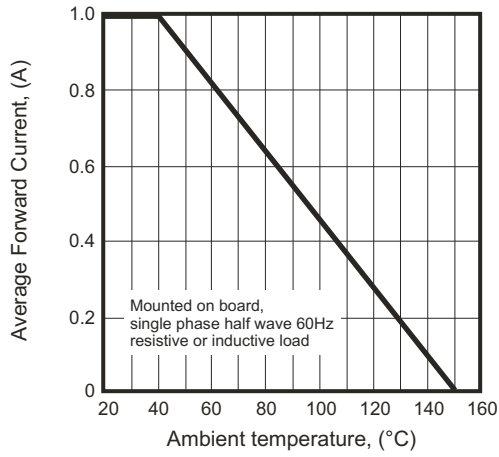


Fig.2 - Maximum Non-Repetitive Surge Current

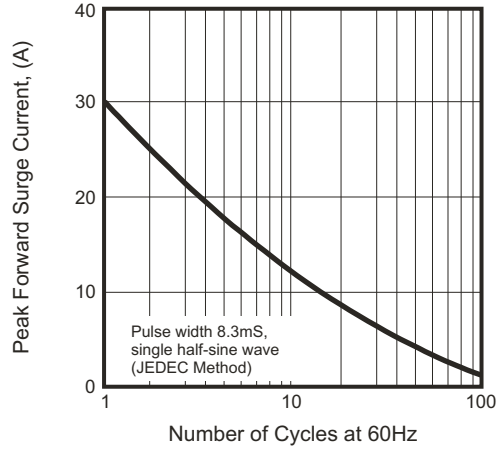


Fig.3 - Typical Reverse Characteristics

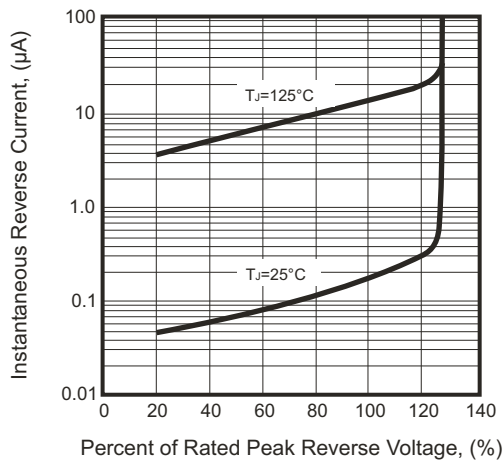
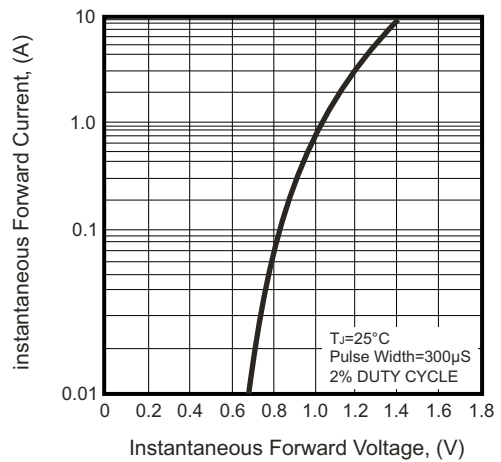
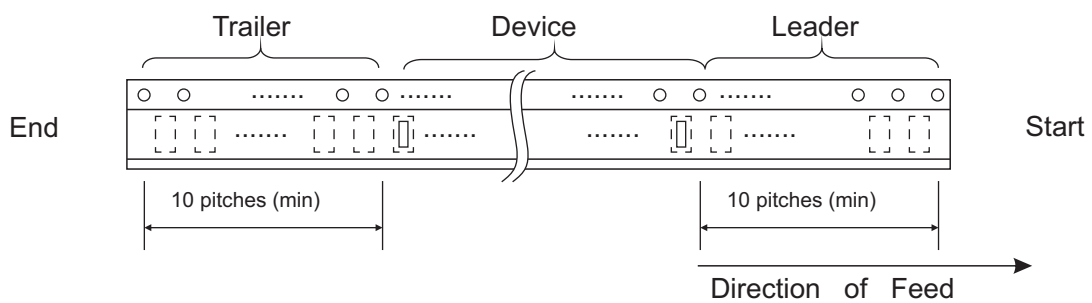
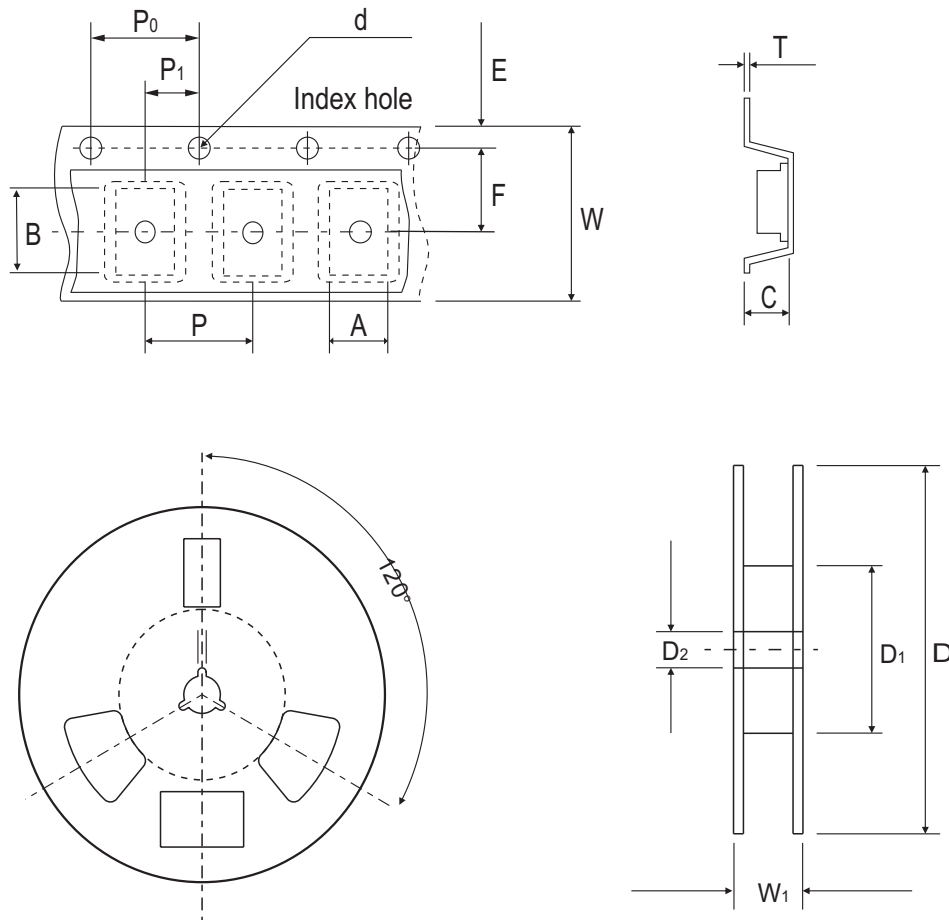


Fig.4 - Typical Forward Characteristics



Reel Taping Specification



| ABS | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|-----|--------|---------------|---------------|---------------|---------------|--------|----------------|----------------|
| | (mm) | 5.31 ± 0.10 | 6.68 ± 0.10 | 1.59 ± 0.20 | 1.55 ± 0.05 | 330 | 50.00 (min) | 13.00 ± 0.20 |
| | (inch) | 0.209 ± 0.004 | 0.263 ± 0.004 | 0.063 ± 0.008 | 0.061 ± 0.002 | 13.000 | 1.969 (min) | 0.512 ± 0.008 |

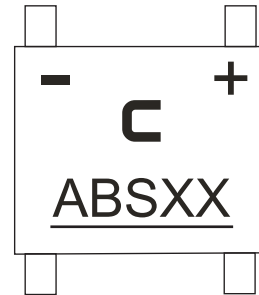
| ABS | SYMBOL | E | F | P | P ₀ | P ₁ | T | W | W ₁ |
|-----|--------|---------------|---------------|---------------|----------------|----------------|-------|---------------|----------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.05 | 8.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 0.30 | 12.00 ± 0.30 | 12.00~14.40 |
| | (inch) | 0.069 ± 0.004 | 0.217 ± 0.002 | 0.315 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.012 | 0.472 ± 0.012 | 0.472~0.657 |

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REV:C

Marking Code

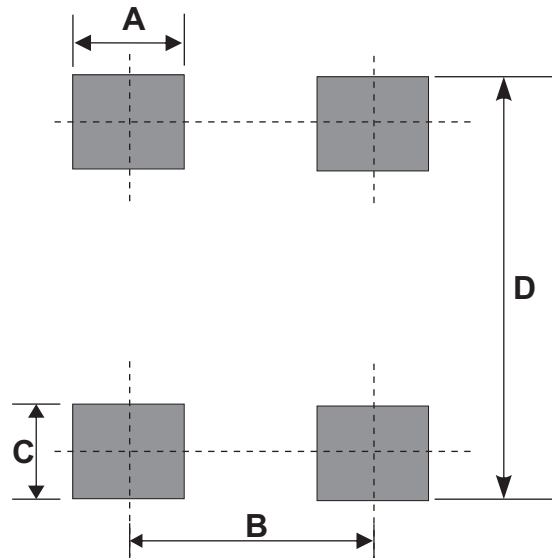
| Part Number | Marking code |
|-------------|--------------|
| ABS05-HF | ABS05 |
| ABS1-HF | ABS1 |
| ABS2-HF | ABS2 |
| ABS4-HF | ABS4 |
| ABS6-HF | ABS6 |
| ABS8-HF | ABS8 |
| ABS10-HF | ABS10 |



XX = Product type marking code

Suggested PAD Layout

| SIZE | ABS | |
|------|----------|-----------|
| | (mm) | (inch) |
| A | 0.80 Min | 0.031 Min |
| B | 4.00 REF | 0.157 REF |
| C | 0.60 Min | 0.024 Min |
| D | 6.20 Max | 0.244 Max |



Standard Packaging

| Case Type | REEL PACK | |
|-----------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| ABS | 5,000 | 13 |