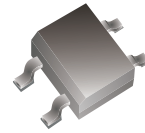


# ABS05-G Thru. ABS10-G

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 A

RoHS Device

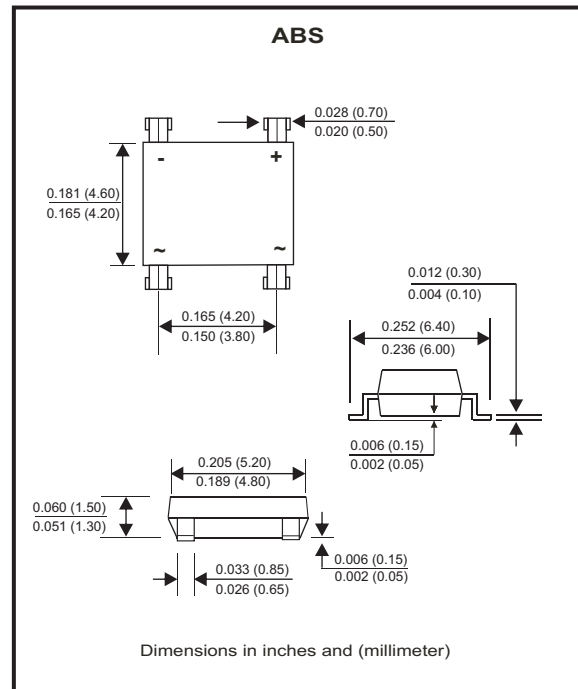


## Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product.
- Small size, simple installation
- High surge current capability
- Pb free product.

## Mechanical data

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



## 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-G     | ABS1-G | ABS2-G | ABS4-G | ABS6-G | ABS8-G | ABS10-G | 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)<br>@ $T_A=40^{\circ}\text{C}$                                        | $I_{(AV)}$      | 1.0         |        |        |        |        |        |         | A                    |
| Peak Forward Surge Current, 8.3ms single half sine-wave, superimposed 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<br>at Rated DC Blocking Voltage<br>@ $T_J=25^{\circ}\text{C}$<br>@ $T_J=125^{\circ}\text{C}$ | $I_R$           | 5.0<br>500  |        |        |        |        |        |         | $\mu\text{A}$        |
| Typical Thermal Resistance (Note 2)                                                                                     | $R_{\theta JA}$ | 80          |        |        |        |        |        |         | $^{\circ}\text{C/W}$ |
| 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.

## RATING AND CHARACTERISTIC CURVES (ABS05-G thru ABS10-G)

Fig.1 - Forward Current Derating Curve

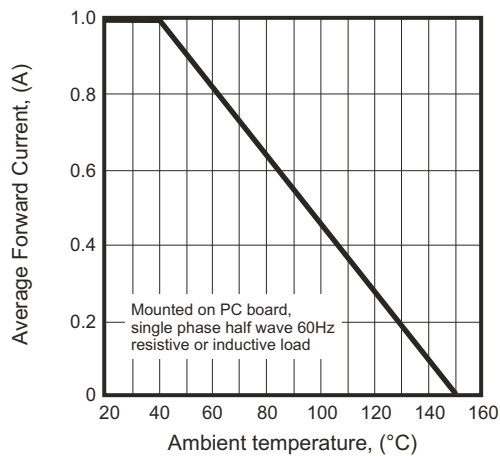


Fig.2 - Maximum Non-Repetitive Surge Current

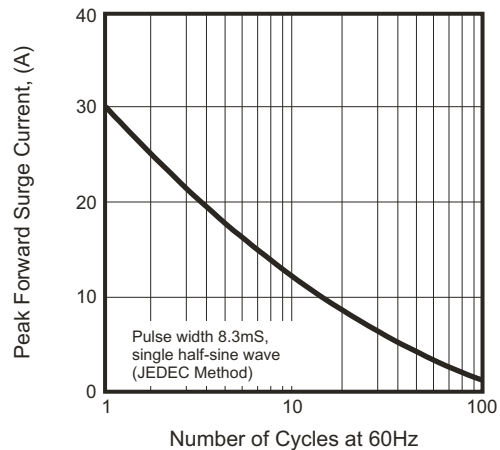


Fig.3 - Typical Reverse Characteristics

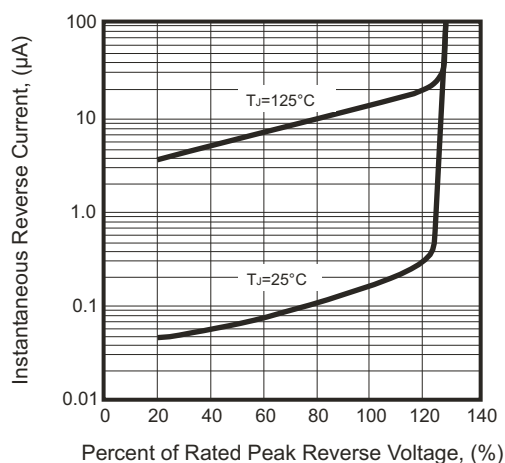
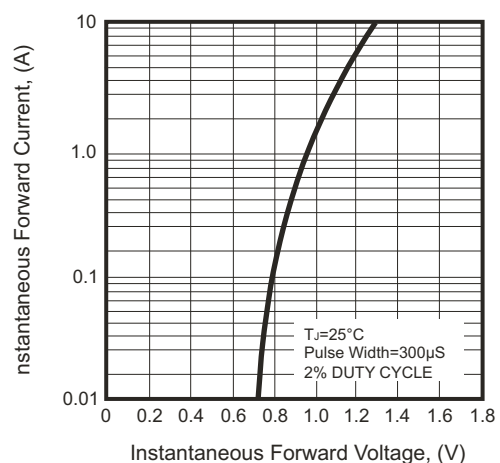
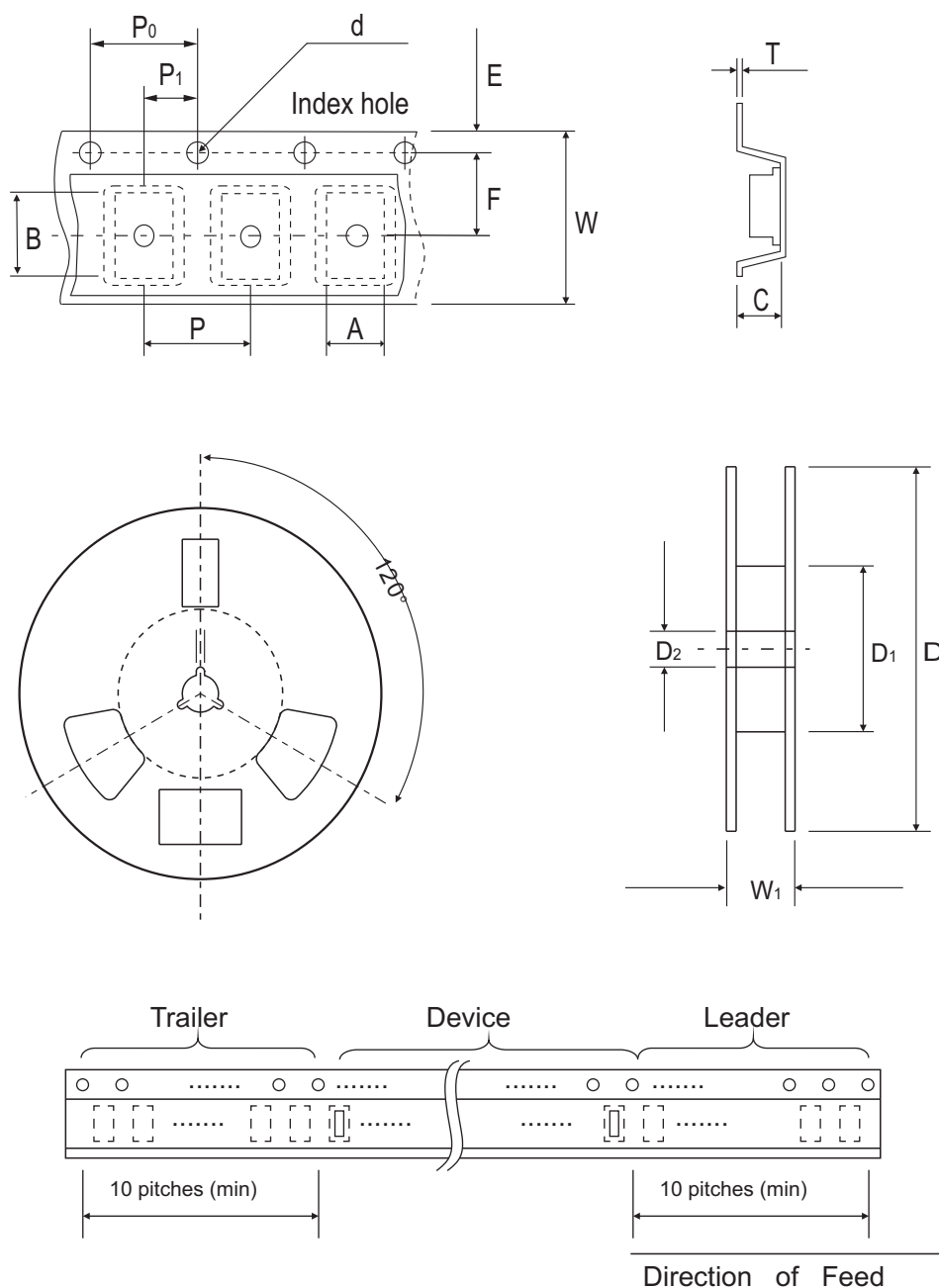


Fig.4 - Typical Forward Characteristics



## Reel Taping Specification

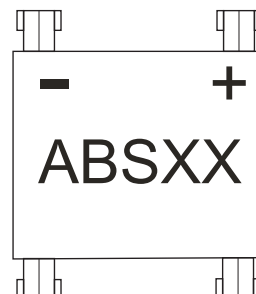


| ABS | SYMBOL | A                 | B                 | C                 | d                 | D      | D1          | D2                |
|-----|--------|-------------------|-------------------|-------------------|-------------------|--------|-------------|-------------------|
|     | (mm)   | $5.31 \pm 0.10$   | $6.68 \pm 0.10$   | $1.59 \pm 0.20$   | $1.55 \pm 0.05$   | 330    | 50.00 (min) | $13.00 \pm 0.20$  |
|     | (inch) | $0.209 \pm 0.004$ | $0.263 \pm 0.004$ | $0.063 \pm 0.008$ | $0.061 \pm 0.002$ | 13.000 | 1.969 (min) | $0.512 \pm 0.008$ |

| ABS | SYMBOL | E                 | F                 | P                 | $P_0$             | $P_1$             | T     | W                 | $W_1$       |
|-----|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------|-------------------|-------------|
|     | (mm)   | $1.75 \pm 0.10$   | $5.50 \pm 0.05$   | $8.00 \pm 0.10$   | $4.00 \pm 0.10$   | $2.00 \pm 0.05$   | 0.30  | $12.00 \pm 0.30$  | 12.00~14.40 |
|     | (inch) | $0.069 \pm 0.004$ | $0.217 \pm 0.002$ | $0.315 \pm 0.004$ | $0.157 \pm 0.004$ | $0.079 \pm 0.002$ | 0.012 | $0.472 \pm 0.012$ | 0.472~0.657 |

## Marking Code

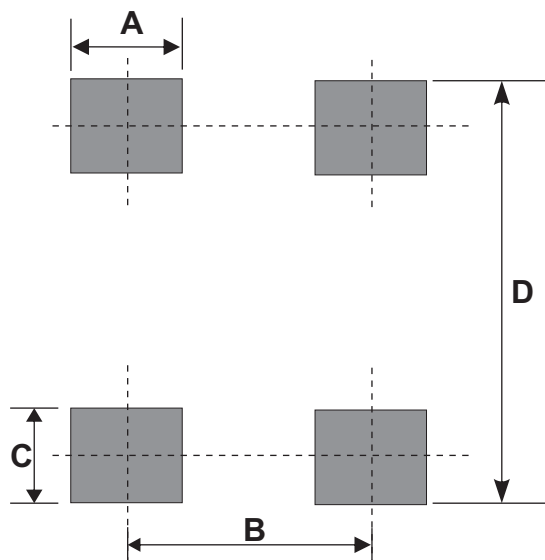
| Part Number | Marking code |
|-------------|--------------|
| ABS05-G     | ABS05        |
| ABS1-G      | ABS1         |
| ABS2-G      | ABS2         |
| ABS4-G      | ABS4         |
| ABS6-G      | ABS6         |
| ABS8-G      | ABS8         |
| ABS10-G     | ABS10        |



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<br>( pcs ) | Reel Size<br>(inch) |
| ABS       | 5,000           | 13                  |

# AMEYA360

## Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct +86 (21) 6401-6692

Email [amall@ameya360.com](mailto:amall@ameya360.com)

QQ 800077892

Skype ameyasales1 ameyasales2

➤ Customer Service :

Email [service@ameya360.com](mailto:service@ameya360.com)

➤ Partnership :

Tel +86 (21) 64016692-8333

Email [mkt@ameya360.com](mailto:mkt@ameya360.com)