



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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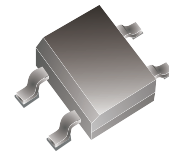


## ABS05-G Thru. ABS10-G

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 A

RoHS Device



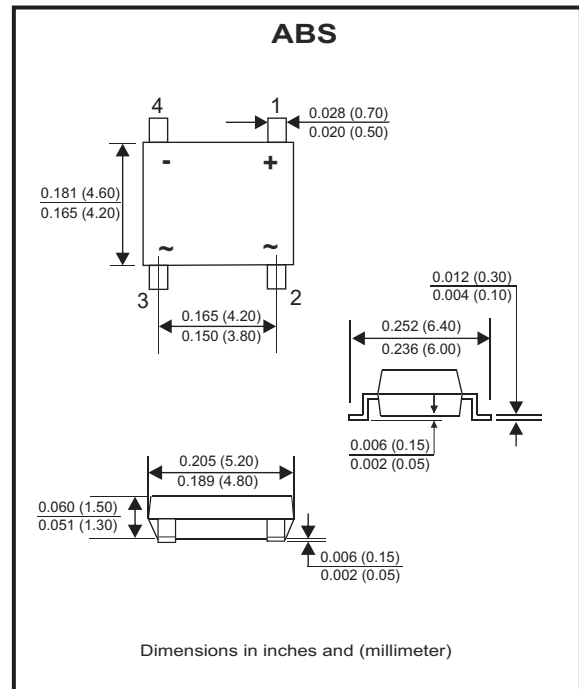
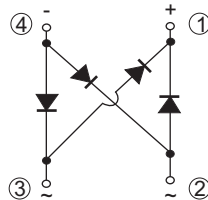
### Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- 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-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) @ $T_A=40^{\circ}\text{C}$	$I_{(AV)}$	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							$\mu\text{A}$
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-G thru ABS10-G)

Fig.1 - Forward Current Derating Curve

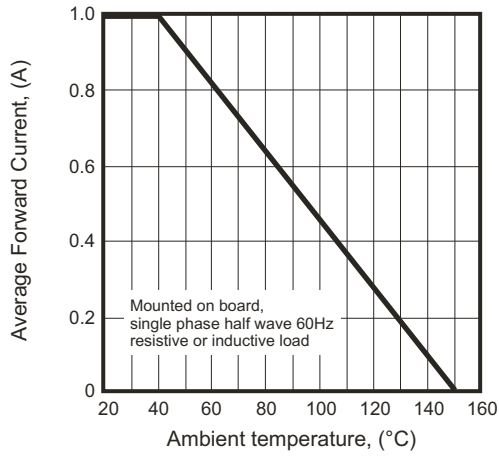


Fig.2 - Maximum Non-Repetitive Surge Current

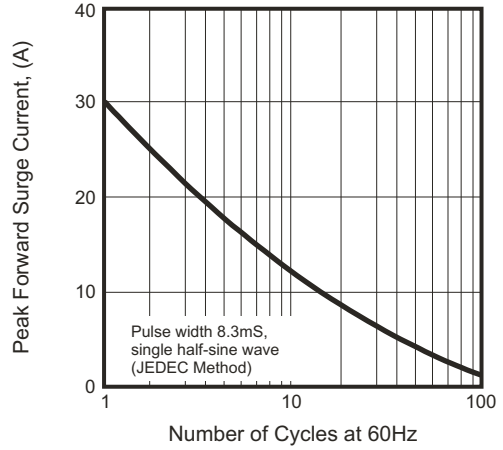


Fig.3 - Typical Reverse Characteristics

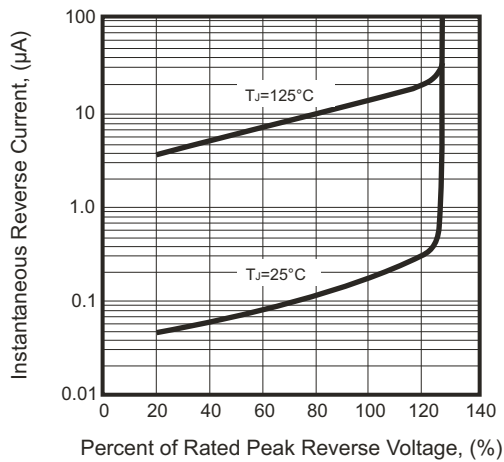
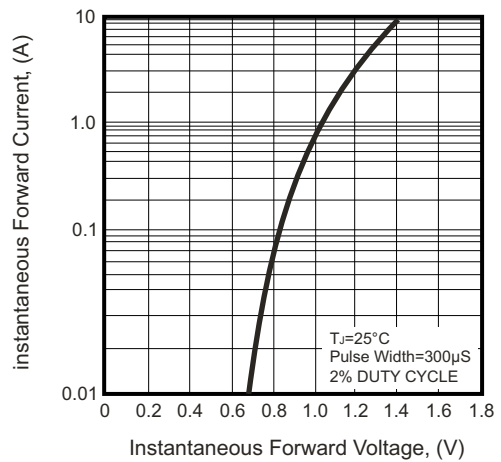
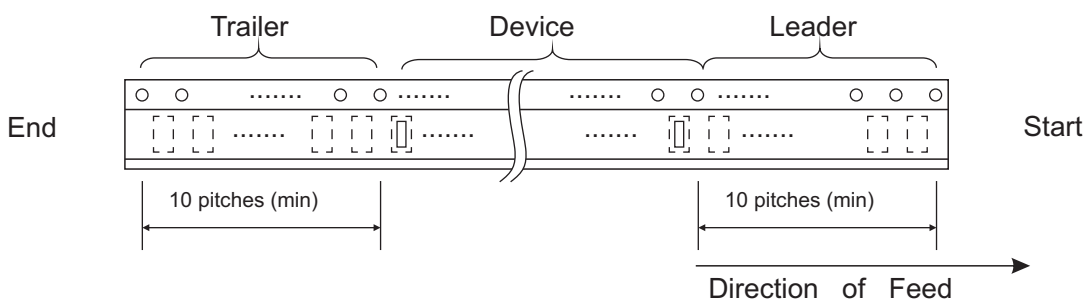
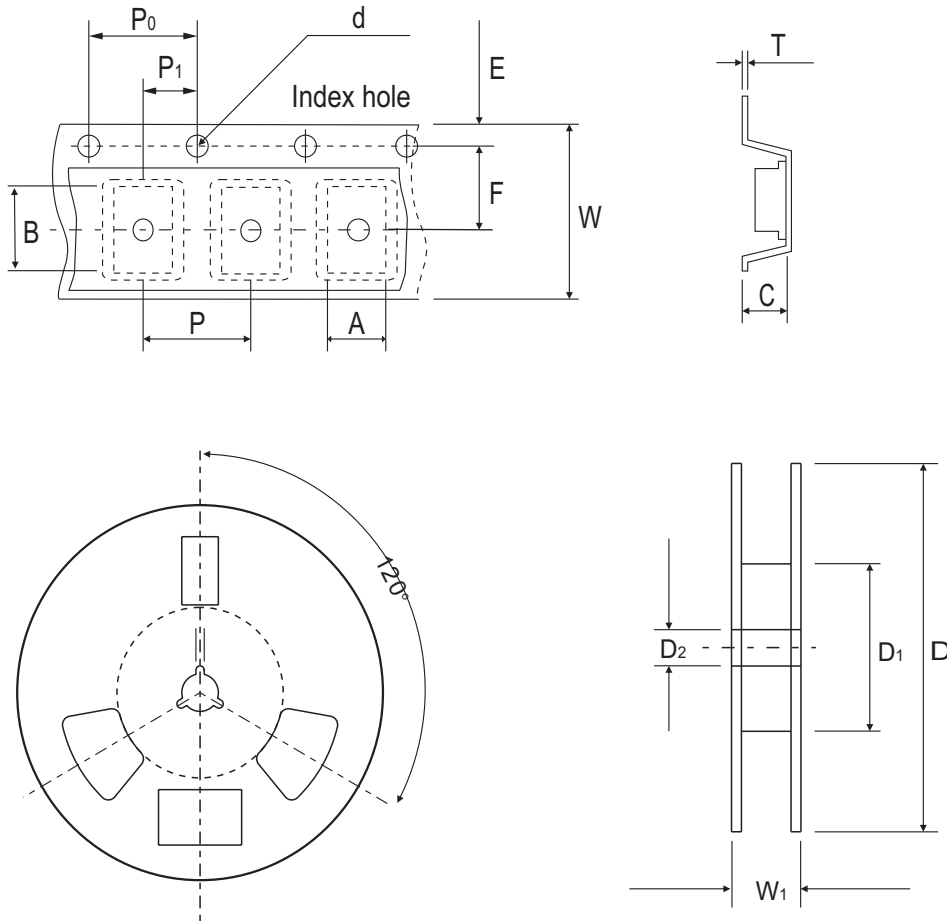


Fig.4 - Typical Forward Characteristics



## Reel Taping Specification



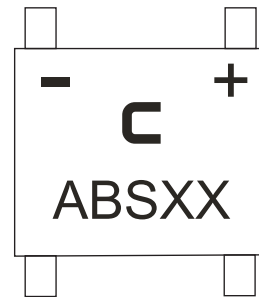
ABS	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	5.31 ± 0.10	6.68 ± 0.10	1.59 ± 0.20	1.55 ± 0.05	330	50.00 (min)	13.00 ± 0.20
	(inch)	0.209 ± 0.004	0.263 ± 0.004	0.063 ± 0.008	0.061 ± 0.002	13.000	1.969 (min)	0.512 ± 0.008

ABS	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(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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## Marking Code

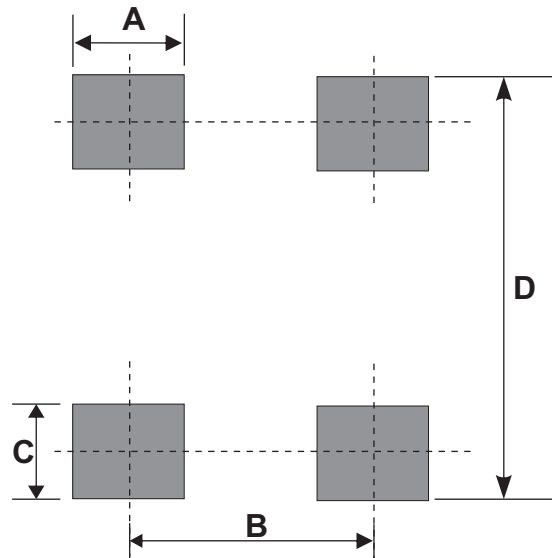
Part Number	Marking code
ABS05-G	ABS05
ABS1-G	ABS1
ABS2-G	ABS2
ABS4-G	ABS4
ABS6-G	ABS6
ABS8-G	ABS8
ABS10-G	ABS10



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 ( pcs )	Reel Size (inch)
ABS	5,000	13