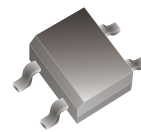


## B05S-G Thru. B10S-G


Reverse Voltage: 50 to 1000 Volts

Forward Current: 0.8 A

RoHS Device

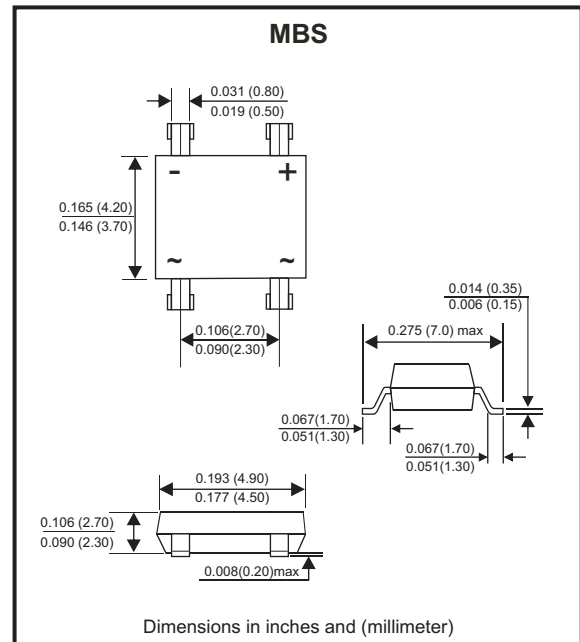


### Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product.
- Pb free product.
- UL recognized file # E349301 

### Mechanical data

- Polarity: Symbol molded on body.
- Weight: 0.125 grams.
- Mounting position: Any.



### 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	B05S-G	B1S-G	B2S-G	B4S-G	B6S-G	B8S-G	B10S-G	Unit
Maximum Recurrent Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (Note 1) @T <sub>A</sub> =40°C		I <sub>(AV)</sub>	0.8							A
Peak Forward Surge Current, 8.3mS single half sine-wave, superimposed on rated load (JEDEC Method)		I <sub>FSM</sub>	30							A
Peak Forward Voltage at 0.8A DC		V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =125°C		I <sub>R</sub>	5.0 500							μA
Typical Junction Capacitance per element (Note 2)		C <sub>J</sub>	15							pF
Typical Thermal Resistance	Junction to ambient	R <sub>θJA</sub>	125							°C/W
	Junction to case	R <sub>θJC</sub>	75							
Operating Temperature Range		T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range		T <sub>STG</sub>	-55 to +150							°C

Notes: 1. Mounted on P.C. Board.  
2. Measured at 1.0MHz and applied reverse voltage of 4V DC.

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

REV:E

## RATING AND CHARACTERISTIC CURVES (B05S-G thru. B10S-G)

Fig.1 - Forward Current Derating Curve

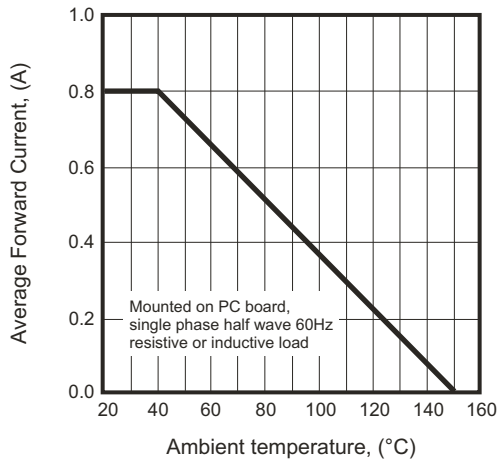


Fig.2 - Maximum Non-Repetitive Surge Current

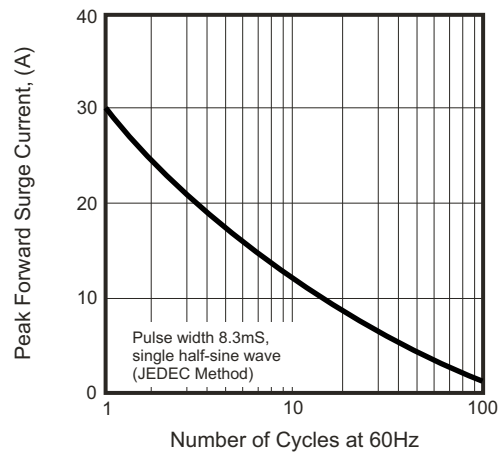


Fig.3 - Typical Reverse Characteristics

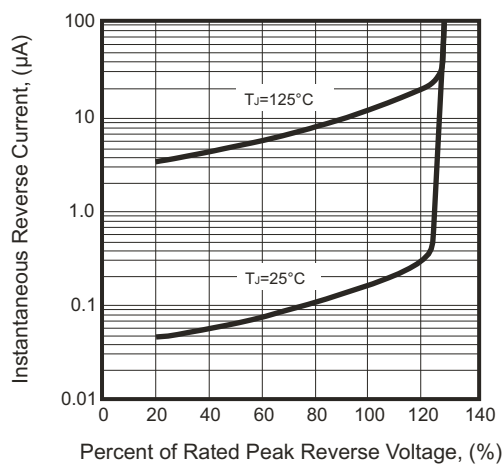


Fig.4 - Typical Forward Characteristics

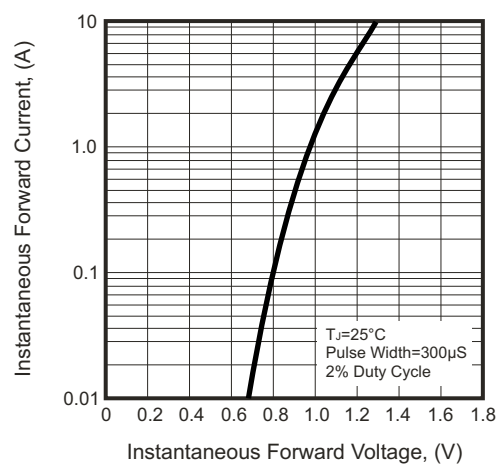
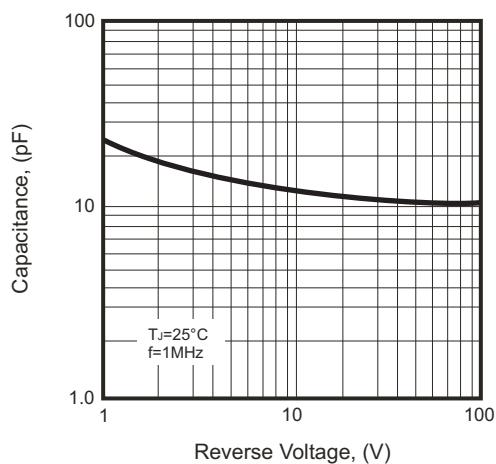
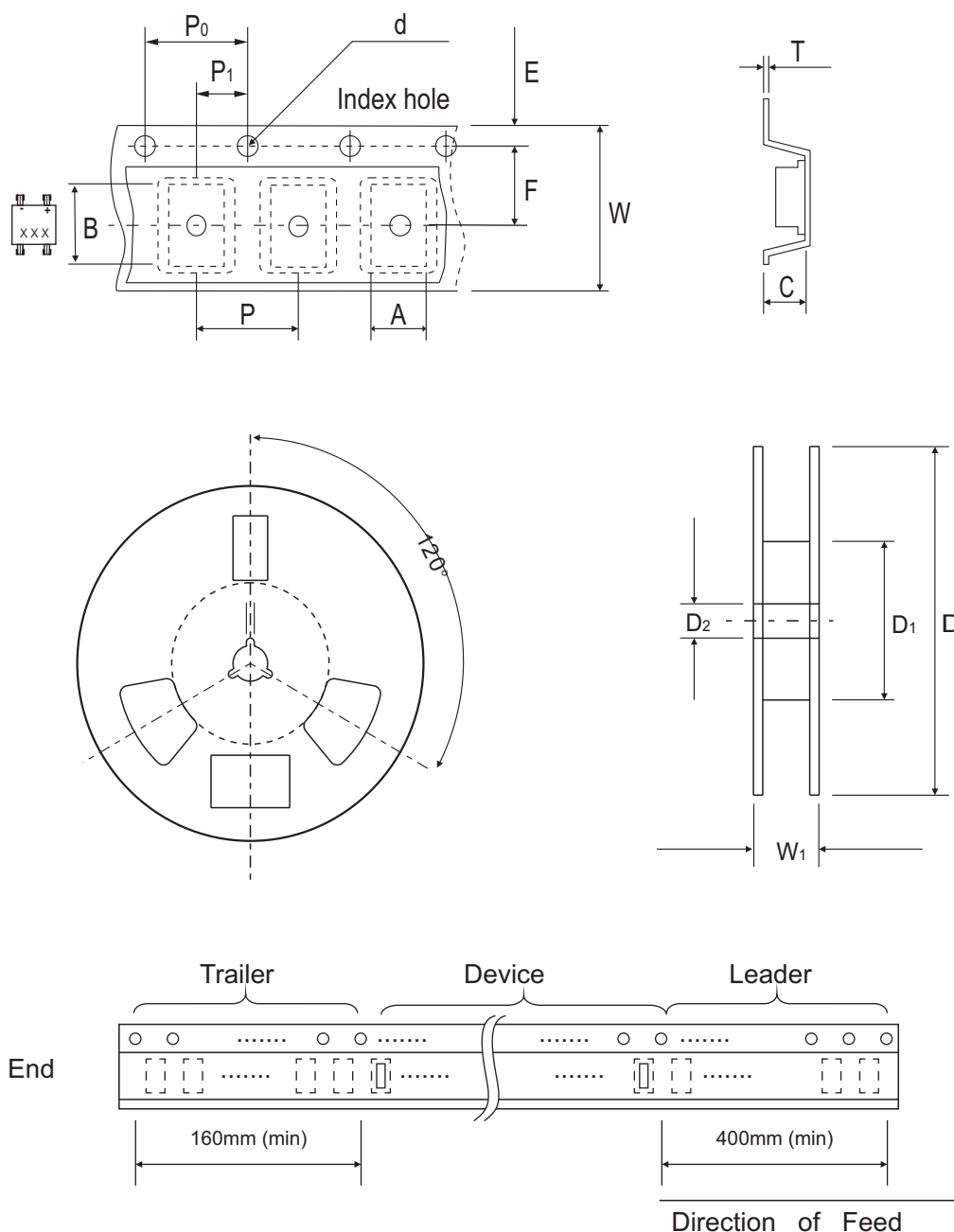


Fig.5 - Typical Junction Capacitance



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## Reel Taping Specification



MBS	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	$4.90 \pm 0.10$	$7.24 \pm 0.10$	$3.33 \pm 0.10$	$1.55 \pm 0.05$	330	50.0 MIN.	$13.00 \pm 0.20$
	(inch)	$0.193 \pm 0.004$	$0.285 \pm 0.004$	$0.131 \pm 0.004$	$0.061 \pm 0.002$	13	1.969 MIN.	$0.512 \pm 0.008$

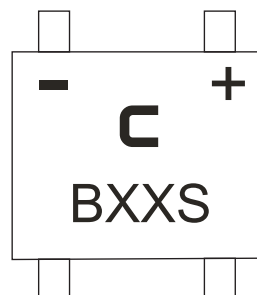
MBS	SYMBOL	E	F	P	$P_0$	$P_1$	T	W	$W_1$
	(mm)	$1.75 \pm 0.10$	$5.50 \pm 0.05$	$8.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.05$	0.30	$12.00 \pm 0.30$	12.00~14.40
	(inch)	$0.069 \pm 0.004$	$0.217 \pm 0.002$	$0.315 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.002$	0.012	$0.472 \pm 0.012$	0.472~0.657

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REV:E

## Marking Code

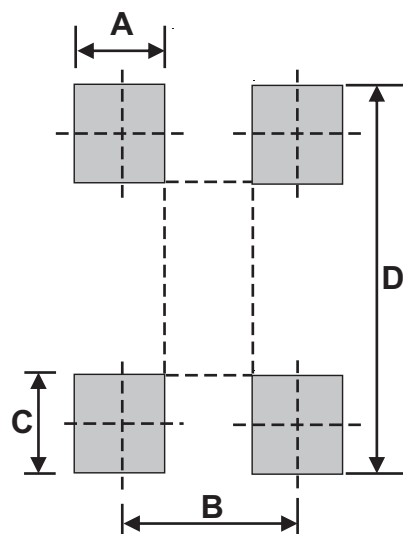
Part Number	Marking code
B05S-G	B05S
B1S-G	B1S
B2S-G	B2S
B4S-G	B4S
B6S-G	B6S
B8S-G	B8S
B10S-G	B10S



X/XX = Product type marking code

## Suggested PAD Layout

SIZE	MBS	
	(mm)	(inch)
A	0.82MIN	0.032MIN
B	2.55REF	0.100REF
C	0.92MIN	0.036MIN
D	7.00MAX	0.276MAX



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
MBS	3,000	13

# Mouser Electronics

Authorized Distributor

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