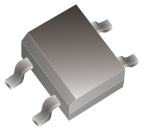
SMD Glass Passivated Bridge Rectifiers

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

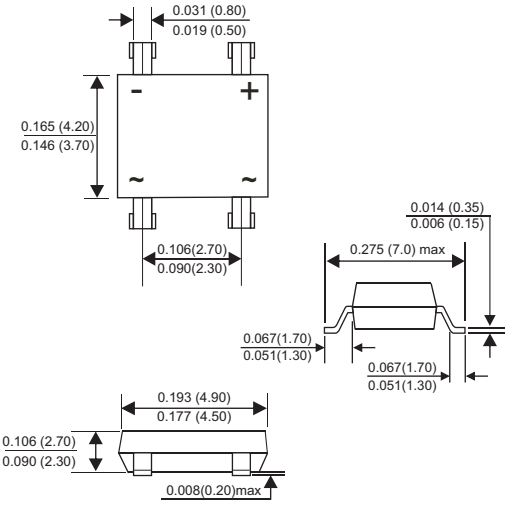
Mechanical data

-Polarity: Symbol molded on body.

-Weight: 0.125 grams.

-Mounting position: Any.

MBS



Dimensions in inches and (millimeter)

Maximum Rating And Electrical Characteristics

Rating at T_A=25°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_{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°C		$I_{(AV)}$	0.8							A
Peak Forward Surge Current, 8.3mS single half sine-wave, superimposed on rated load (JEDEC Method)		I_{FSM}	30							A
Peak Forward Voltage at 0.8A DC		V_F	1.1							V
Maximum DC Reverse Current @T_J=25°C at Rated DC Blocking Voltage @T_J=125°C		I_R	5.0 500							μA
Typical Junction Capacitance per element (Note 2)		C_J	15							pF
Typical Thermal Resistance	Junction to ambient	$R_{\theta JA}$	125							°C/W
	Junction to case	$R_{\theta JC}$	75							
Operating Temperature Range		T_J	-55 to +150							°C
Storage Temperature Range		T_{STG}	-55 to +150							°C

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

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

Fig.1 - Forward Current Derating Curve

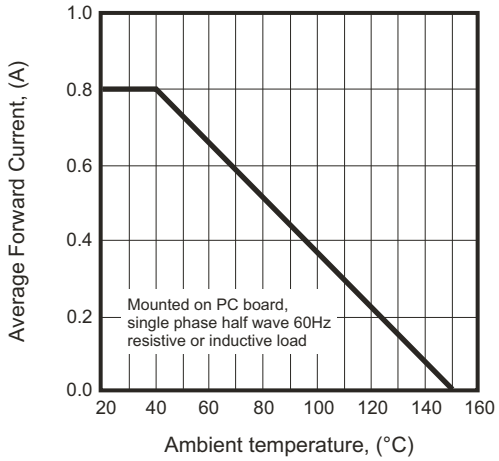


Fig.2 - Maximum Non-Repetitive Surge Current

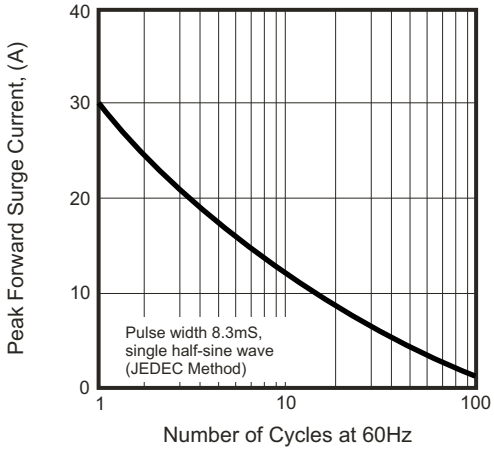


Fig.3 - Typical Reverse Characteristics

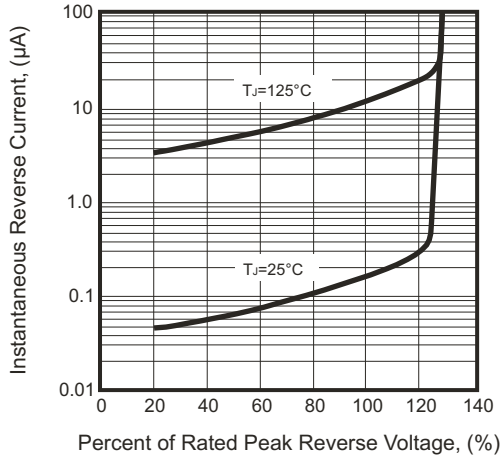


Fig.4 - Typical Forward Characteristics

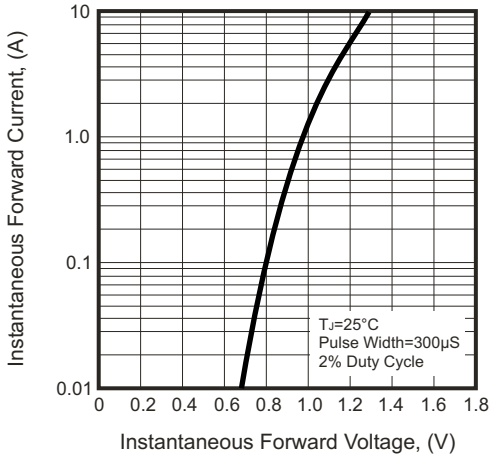
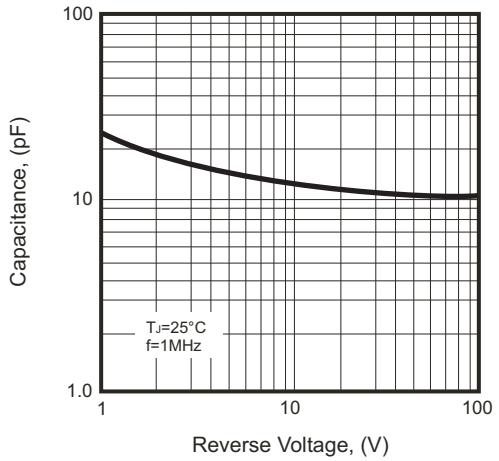
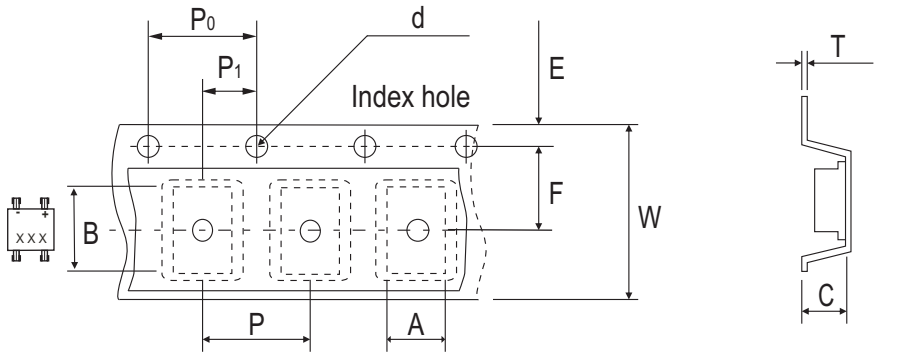


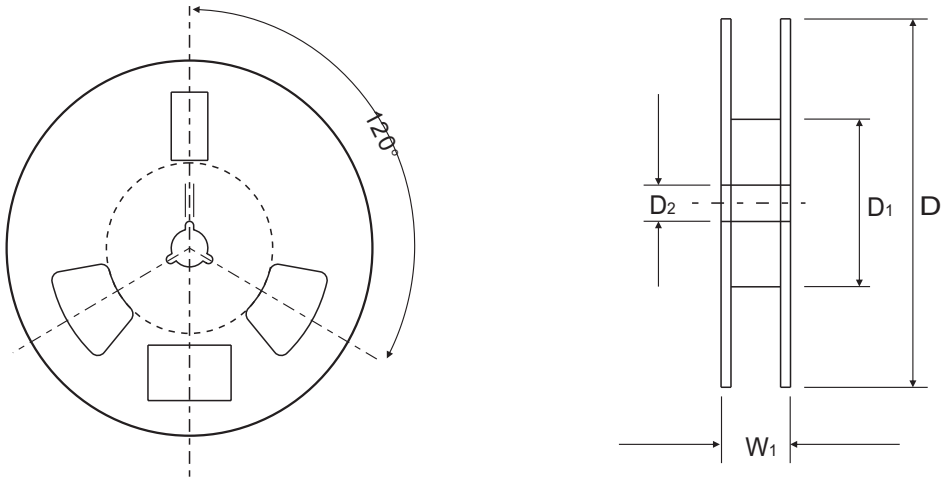
Fig.5 - Typical Junction Capacitance

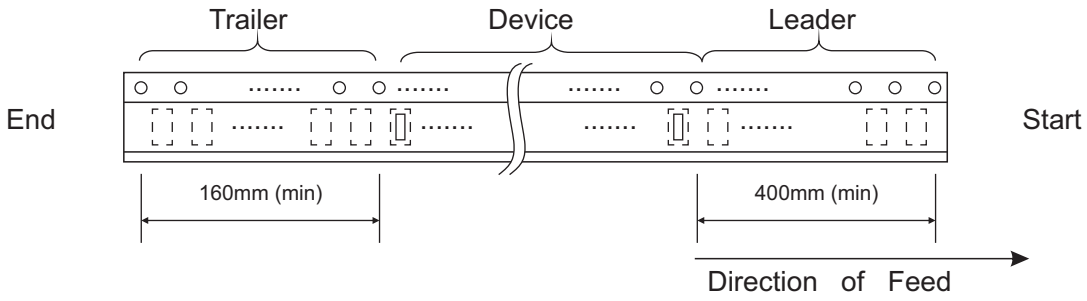


Company reserves the right to improve product design , functions and reliability without notice.

Reel Taping Specification







	SYMBOL	A	B	C	d	D	D_1	D_2
MBS	(mm)	4.90 ± 0.10	7.24 ± 0.10	3.33 ± 0.10	1.55 ± 0.05	330	50.0 MIN.	13.00 ± 0.20
	(inch)	0.193 ± 0.004	0.285 ± 0.004	0.131 ± 0.004	0.061 ± 0.002	13	1.969 MIN.	0.512 ± 0.008

	SYMBOL	E	F	P	P_0	P_1	T	W	W_1
MBS	(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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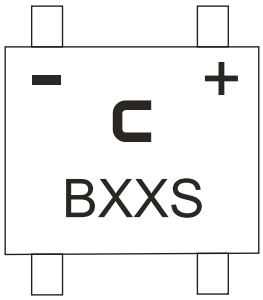
Marking Code

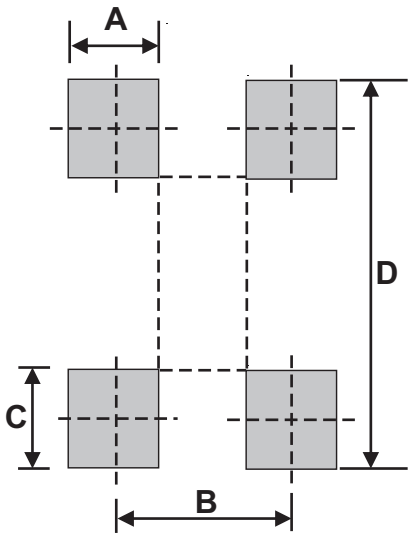
Part Number	Marking code
B05S-G	B05S
B1S-G	B1S
B2S-G	B2S
B4S-G	B4S
B6S-G	B6S
B8S-G	B8S
B10S-G	B10S



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