ABS05 THRU ABS10

Glass Passivated Bridge Rectifiers

Reverse Voltage: 50 to 1000 Volts
Forward Current: 1.0 Ampere
RoHS Device

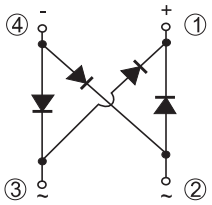
Features

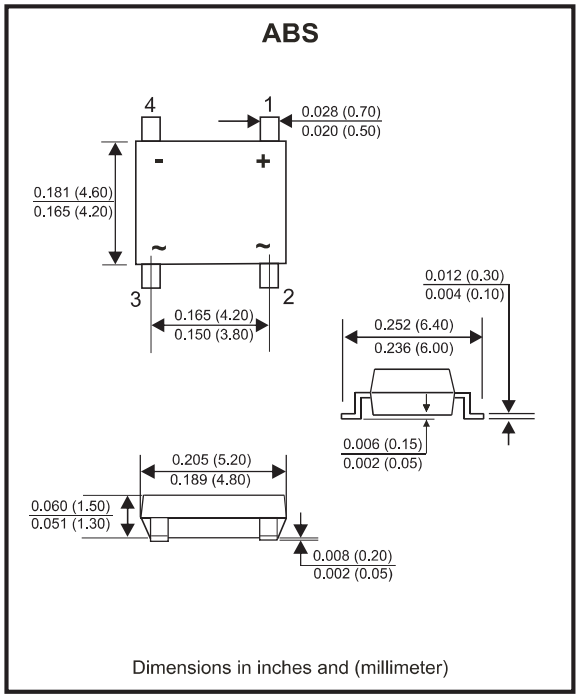
- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Lead tin plated copper.

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°C, unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Parameter	Symbol	ABS05	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	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
Average rectified output current at T_C=125°C	I_O	1.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	35							A
Maximum Forward Voltage at 1.0A 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	5.0 100							μA
Typical junction capacitance (Note 1)	C_j	13							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	72							°C/W
Typical Thermal Resistance	$R_{\theta JC}$	20							°C/W
Operating and storage temperature range	T_j, T_{stg}	-55 to +150							°C

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

Rating and Characteristics Curves

Fig.1 - Forward Current Derating Curve

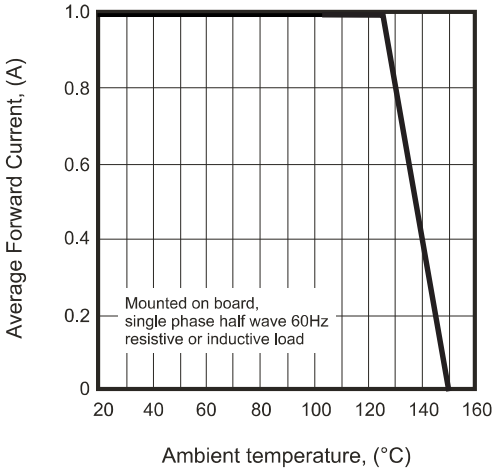


Fig.2 - Maximum Non-Repetitive Surge Current

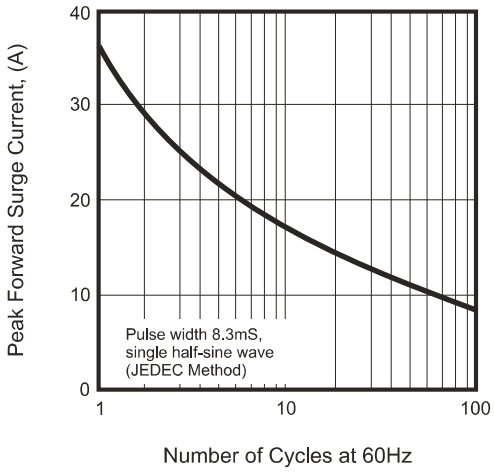


Fig.3 - Typical Reverse Characteristics

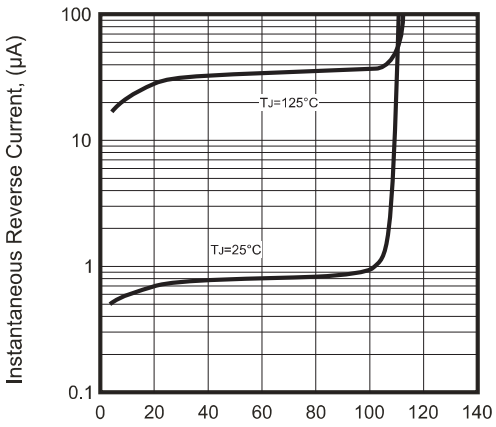


Fig.4 - Typical Forward Characteristics

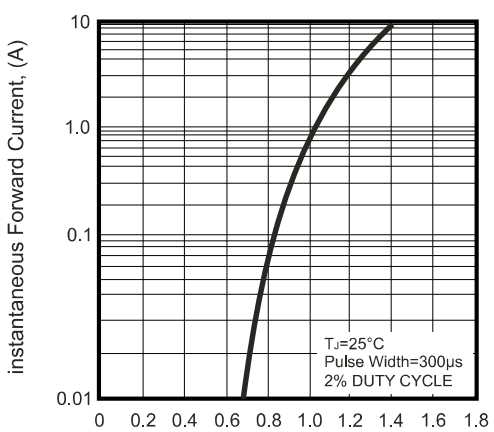
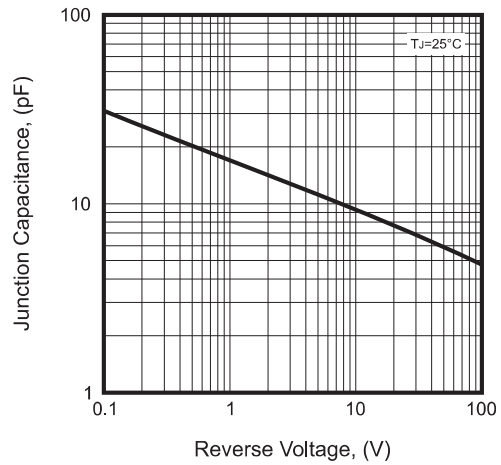
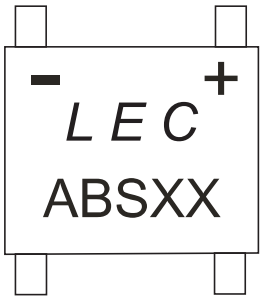


Fig.5 - Typical Junction Capacitance



Marking Code

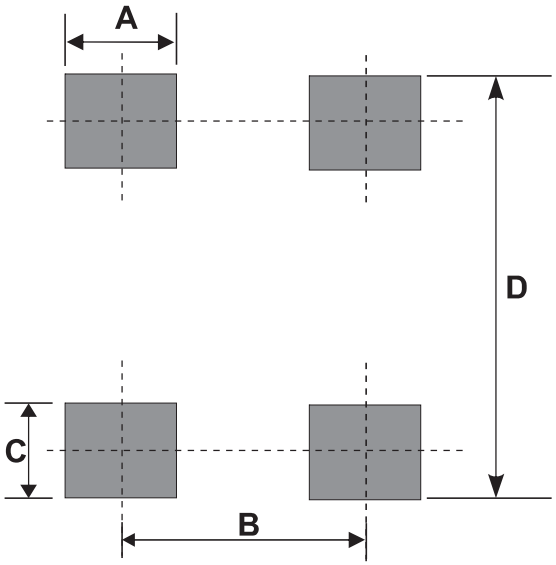
Part Number	Marking code
ABS05	ABS05
ABS1	ABS1
ABS2	ABS2
ABS4	ABS4
ABS6	ABS6
ABS8	ABS8
ABS10	ABS10



LEC = Longmacro Logo
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

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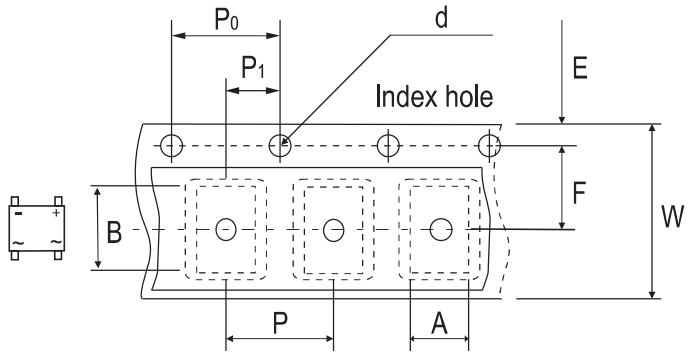
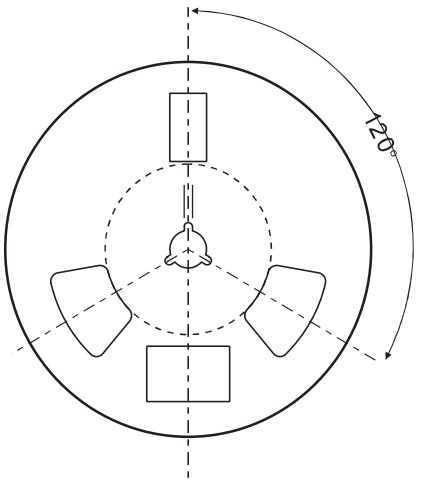
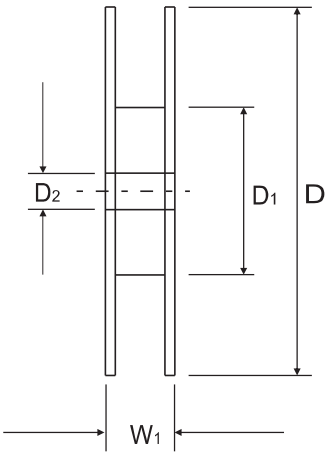
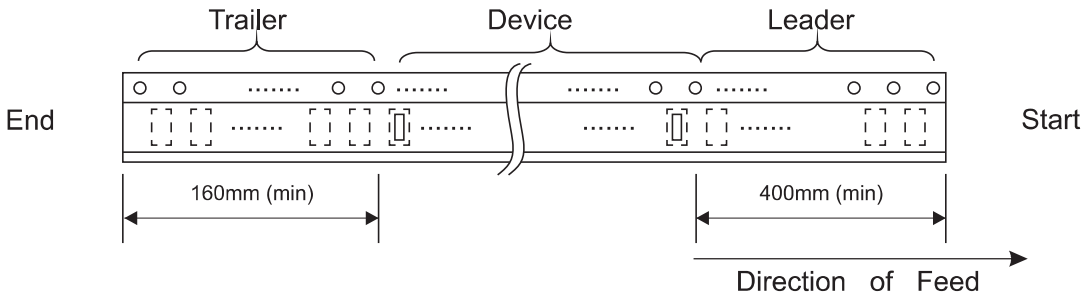
Reel Taping Specification









	SYMBOL	A	B	C	d	D	D1	D2
ABS	(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

	SYMBOL	E	F	P	P0	P1	T	W	W1
ABS	(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