

# ABS2 THRU ABS10

## 1.0A Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifiers-200-1000V

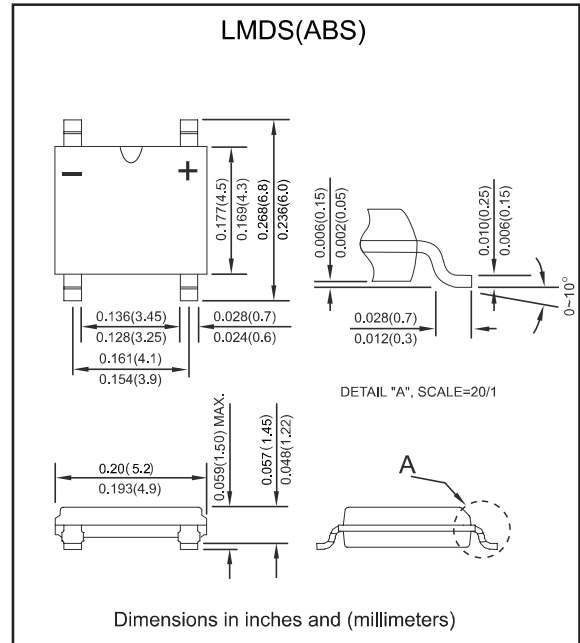
### Features

- Glass passivated junction
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°C / 10 seconds / 0.375" ( 9.5mm ) lead length at 5 lbs., ( 2.3 kg ) tension
- High surge current capability
- Suffix "-H" indicates Halogen-free part, ex.ABS2-H.
- UL recognized file # E321971

### Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, LMDS(ABS)
- Terminals : Solder plated, solderable per MIL-STD-202, Method 208
- Polarity : marked on body
- Mounting Position : Any

### Package outline



### Maximum ratings and Electrical Characteristics (AT T<sub>a</sub>=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	On glass-epoxy P.C.B. On aluminum substrate	I <sub>o</sub>			0.8 1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I <sub>FSM</sub>			30	A
Reverse current	V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 25°C V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 125°C	I <sub>R</sub>			5.0 200	μA
Typical Thermal resistance	Junction to lead On aluminum substrate On Glass-Epoxy substrate	R <sub>θJL</sub> R <sub>θJA</sub>		25 62.5 80		°C/W
Rating for fusing (t < 8.3 ms)		I <sup>2</sup> t			3.7	A <sup>2</sup> s
Storage temperature		T <sub>STG</sub>	-55		+150	°C

SYMBOLS	V <sub>RRM</sub> *1 (V)	V <sub>RMS</sub> *2 (V)	V <sub>R</sub> *3 (V)	V <sub>F</sub> *4 (V)	Operating temperature T <sub>J</sub> , (°C)
ABS2	200	140	200	1.00	-55 to +150
ABS4	400	280	400		
ABS6	600	420	600		
ABS8	800	560	800		
ABS10	1000	700	1000		

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@I<sub>F</sub>=0.8A

## Rating and characteristic curves (ABS2 THRU ABS10)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

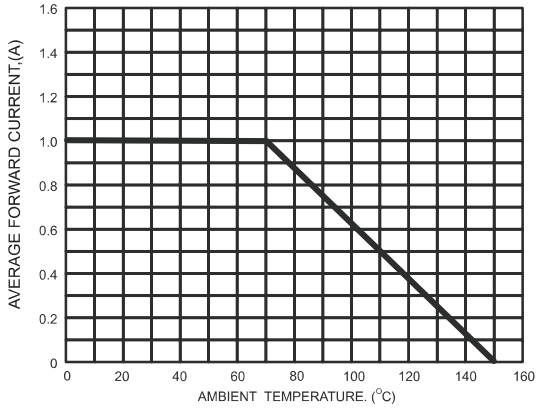


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

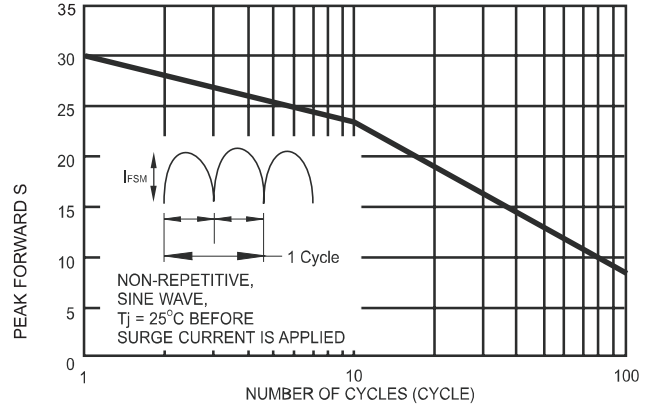


FIG.3-TYPICAL FORWARD CHARACTERISTICS

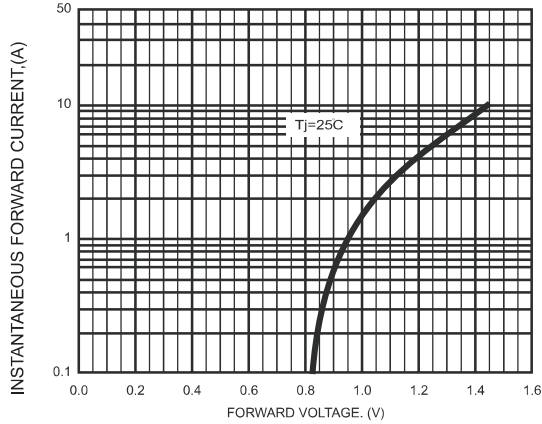


FIG.4-TYPICAL REVERSE CHARACTERISTICS

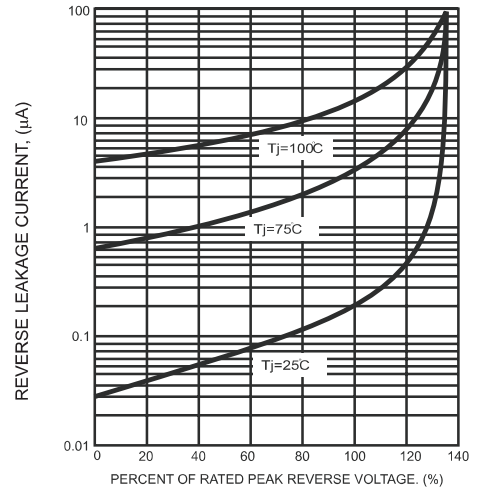
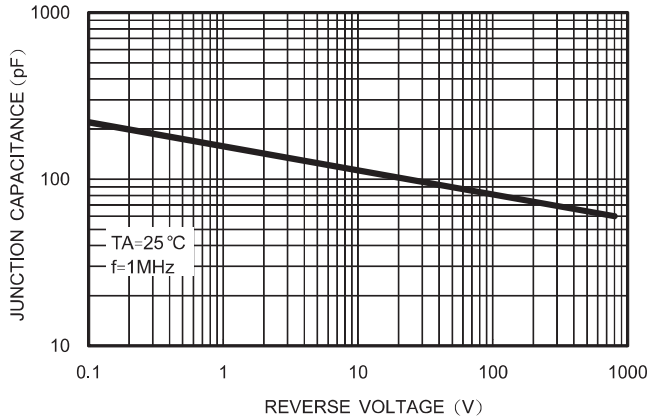
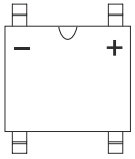
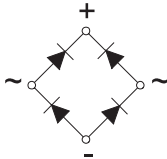


FIG.5-TYPICAL JUNCTION CAPACITANCE

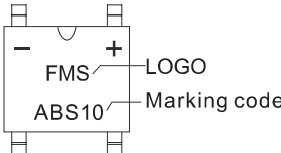
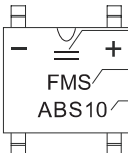


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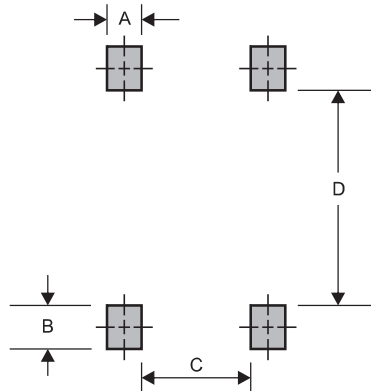
## Pinning information

Simplified outline	Symbol
	

## Marking

Type number	Marking code	Example	
ABS2	ABS2	1. For Halogen Device	2. For Halogen-free Device
ABS4	ABS4		
ABS6	ABS6		1st line: ≡ indicate Halogen-Free.
ABS8	ABS8		2ndline: LOGO
ABS10	ABS10		3rdline: Marking code

## Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C	D
LMDS/ABS	0.024 (0.60)	0.024 (0.60)	0.132 (3.35)	0.193 (4.90)