

ABS2 THRU ABS10

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

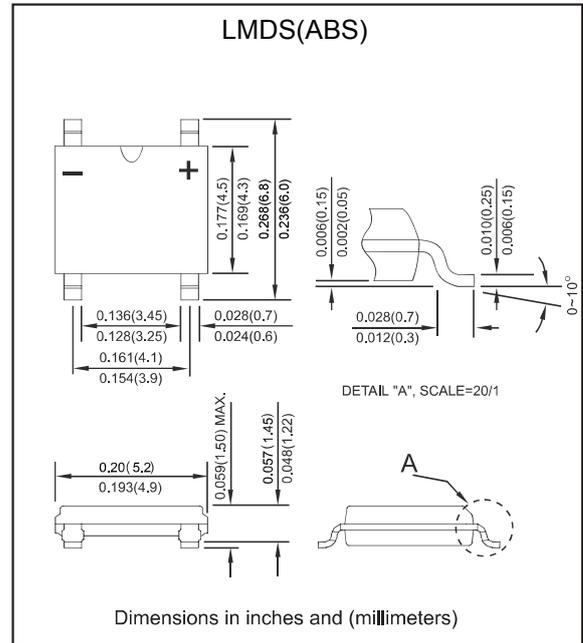
Features

- 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
- Weight : Approximated 0.099 gram

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	On glass-epoxy P.C.B. On aluminum substrate	I_o			0.8 1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			30	A
Reverse current	$V_R = V_{RRM}$ $T_J = 25^{\circ}\text{C}$ $V_R = V_{RRM}$ $T_J = 125^{\circ}\text{C}$	I_R			5.0 200	μA
Typical Thermal resistance	Junction to lead On aluminum substrate On Glass-Epoxy substrate	$R_{\theta JL}$ $R_{\theta JA}$		25 62.5 80		$^{\circ}\text{C}/\text{W}$
Rating for fusing (t < 8.3 ms)		I^2t			3.7	A^2s
Storage temperature		T_{STG}	-55		+150	$^{\circ}\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^{\circ}\text{C}$)
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@ $I_F=0.8\text{A}$

Rating and characteristic curves (ABS2 THRU ABS10)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

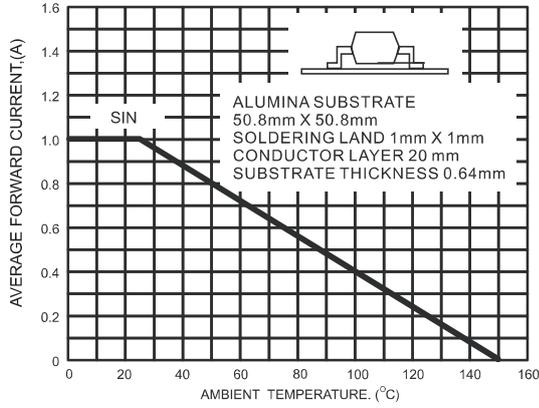


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

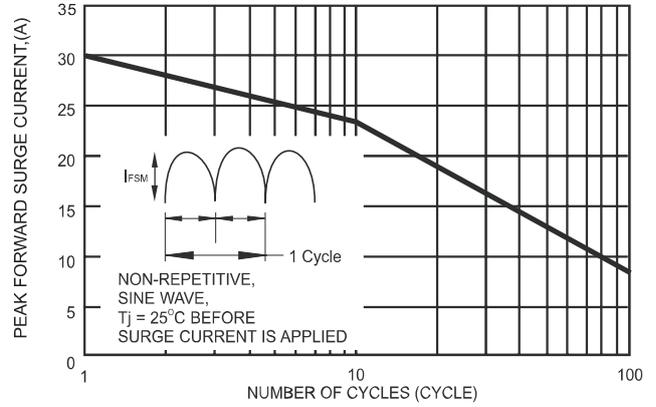


FIG.3-TYPICAL FORWARD CHARACTERISTICS

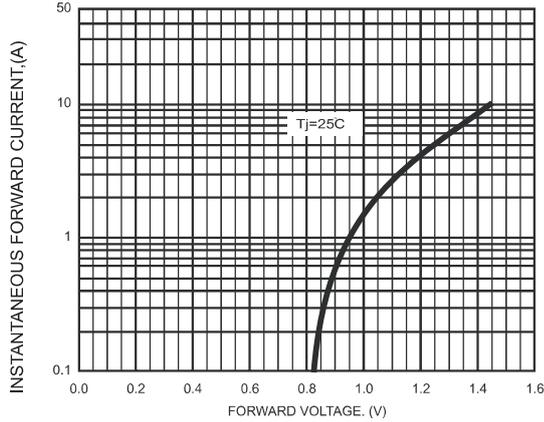


FIG.4-TYPICAL REVERSE CHARACTERISTICS

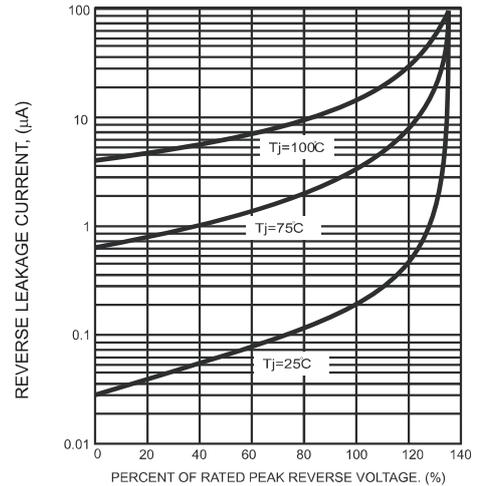
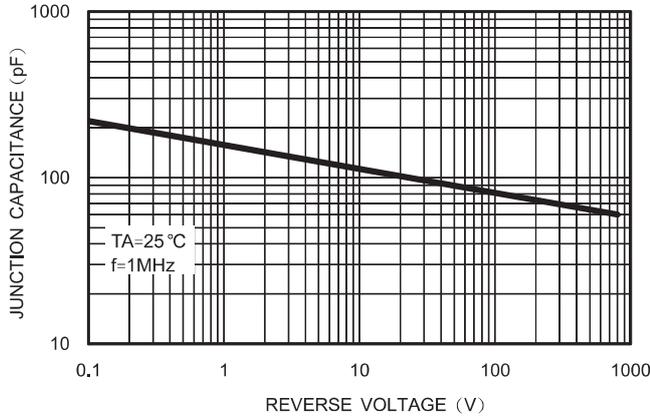
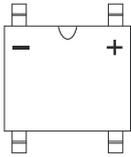
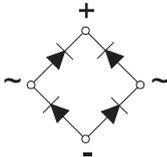


FIG.5-TYPICAL JUNCTION CAPACITANCE

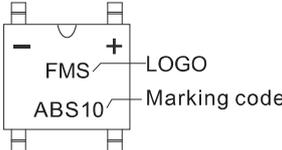
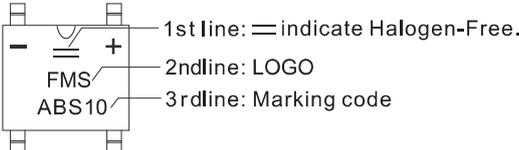


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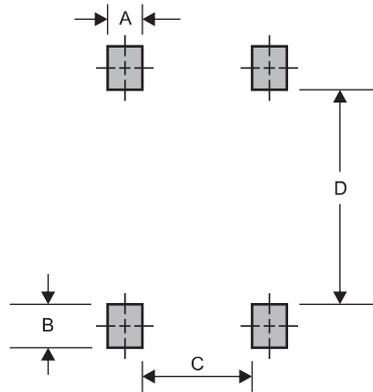
Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code	Example	
ABS2	ABS2	1. For Halogen Device	2. For Halogen-free Device
ABS4	ABS4		
ABS6	ABS6		
ABS8	ABS8		
ABS10	ABS10		

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)