

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

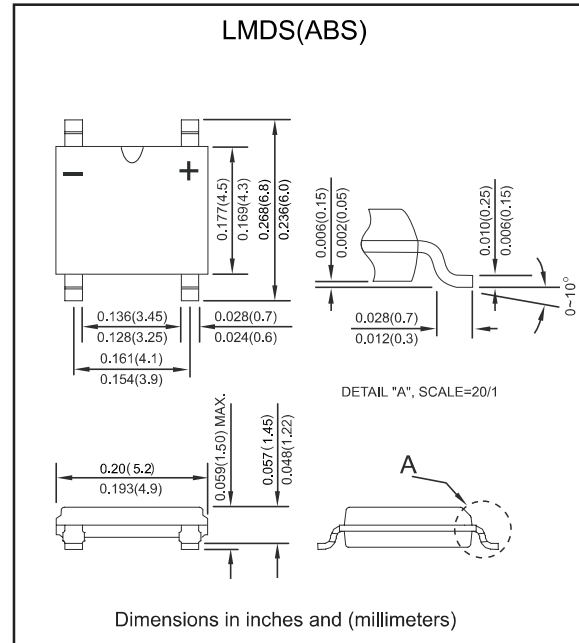
Features

- 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
- Compliant to Halogen-free

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 $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	On aluminum substrate	I_o			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			30	A
Reverse current	$V_R = V_{RRM} \quad T_J = 25^{\circ}\text{C}$ $V_R = V_{RRM} \quad T_J = 125^{\circ}\text{C}$	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@ $I_F=1.0\text{A}$

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

Rating and characteristic curves (ABS2 THRU ABS10)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

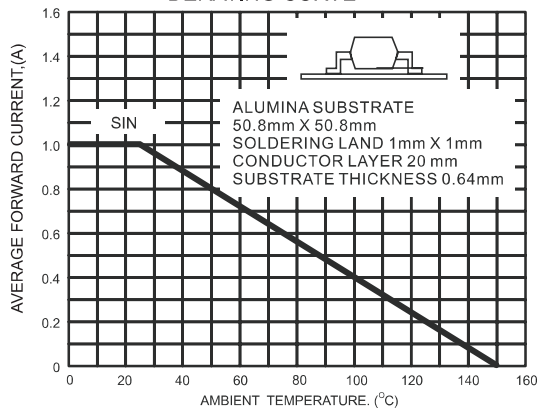


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

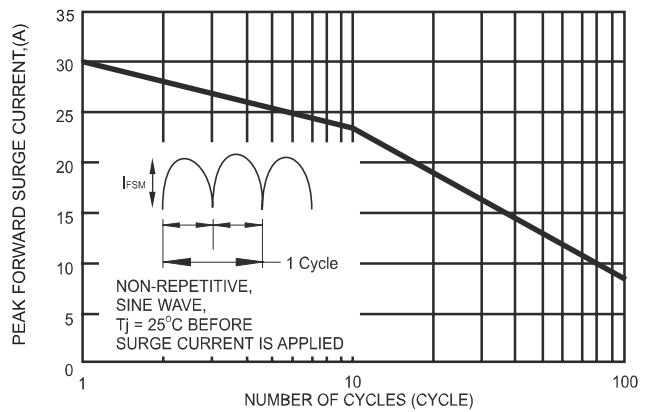


FIG.3-TYPICAL FORWARD CHARACTERISTICS

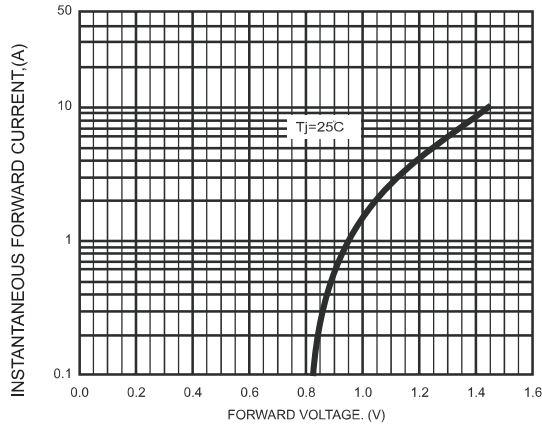


FIG.4-TYPICAL REVERSE CHARACTERISTICS

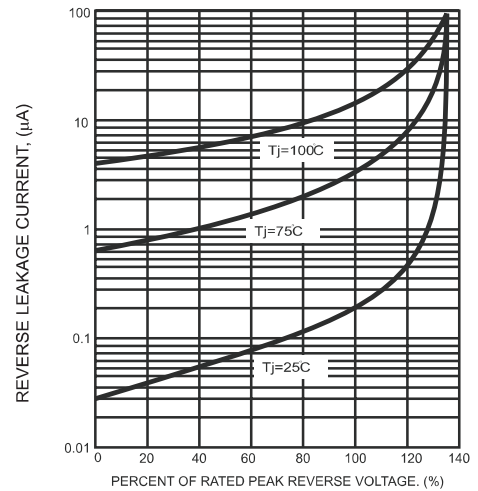
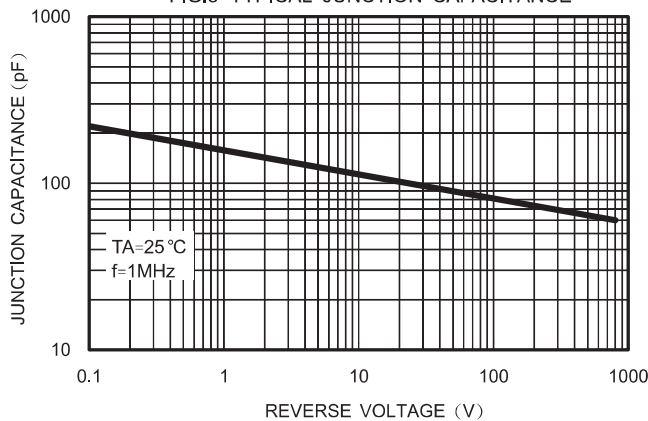
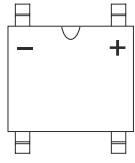
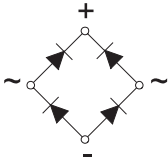


FIG.5-TYPICAL JUNCTION CAPACITANCE



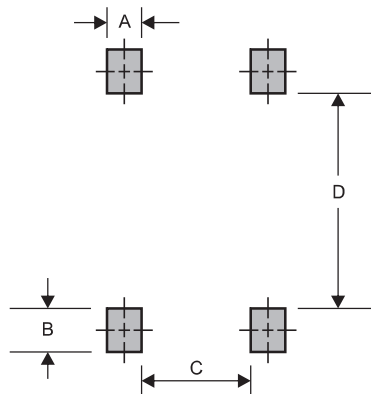
Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
ABS2	ABS2
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)