

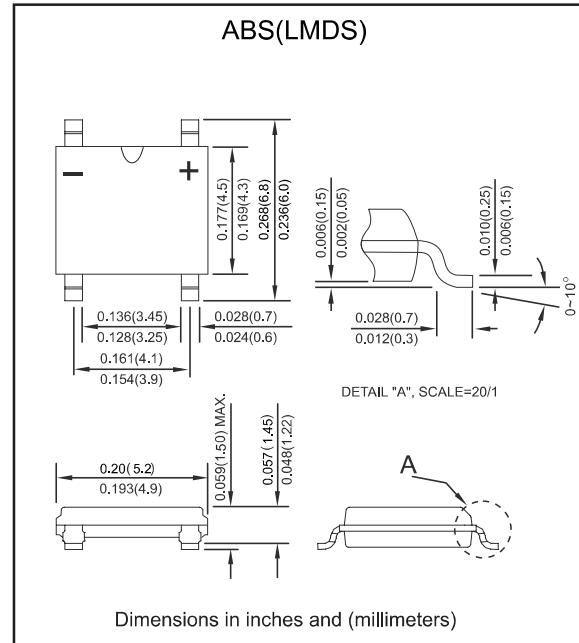
### Features

- 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         | sine wave,R-load, $T_J=25^\circ\text{C}$  | $I_o$                              |      |                  | 2.0        | A                    |
| Forward surge current             | 8.3ms single half sine-wave superimposed on rate load (JEDEC methode)                         | $I_{FSM}$                          |      |                  | 50         | A                    |
| Reverse current                   | $V_R = V_{RRM} \quad T_J = 25^\circ\text{C}$<br>$V_R = V_{RRM} \quad T_J = 125^\circ\text{C}$ | $I_R$                              |      |                  | 5.0<br>200 | $\mu\text{A}$        |
| Typical Thermal resistance        | Junction to lead<br>On aluminum substrate<br>On Glass-Epoxy substrate                         | $R_{\theta JL}$<br>$R_{\theta JA}$ |      | 25<br>62.5<br>80 |            | $^\circ\text{C/W}$   |
| Rating for fusing ( $t < 8.3$ ms) |   | $I^2t$                             |      |                  | 10.37      | $\text{A}^2\text{s}$ |
| Storage temperature               |   | $T_{STG}$                          | -55  |                  | +150       | $^\circ\text{C}$     |

| SYMBOLS | $V_{RRM}^{*1}$<br>(V) | $V_{RMS}^{*2}$<br>(V) | $V_R^{*3}$<br>(V) | $V_F^{*4}$<br>(V) | Operating temperature<br>$T_J$ , ( $^\circ\text{C}$ ) |
|---------|-----------------------|-----------------------|-------------------|-------------------|---|
| ABS22   | 200                   | 140                   | 200               | 1.0               | -55 to +150   |
| ABS24   | 400                   | 280                   | 400               |                   |   |
| ABS26   | 600                   | 420                   | 600               |                   |   |
| ABS28   | 800                   | 560                   | 800               |                   |   |
| ABS210  | 1000                  | 700                   | 1000              |                   |   |

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@ $I_F=2.0\text{A}$

### Rating and characteristic curves (ABS22 THRU ABS210)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

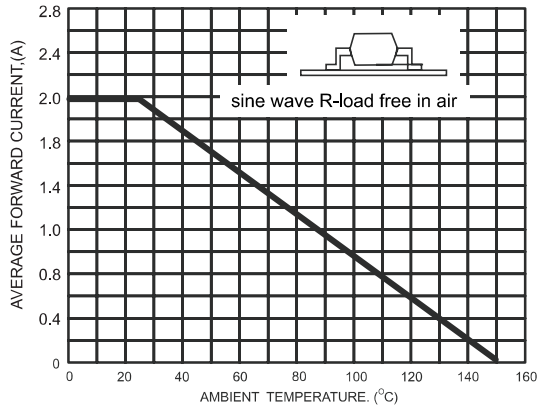


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

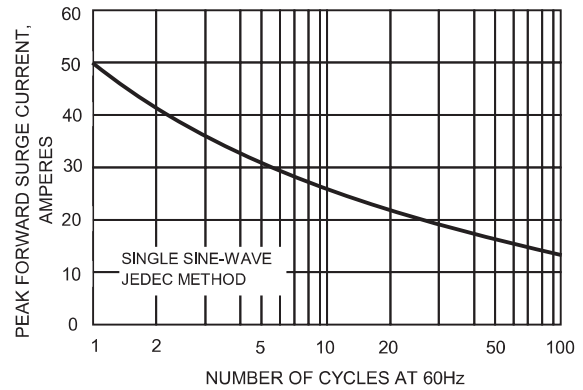


FIG.3-TYPICAL FORWARD CHARACTERISTICS

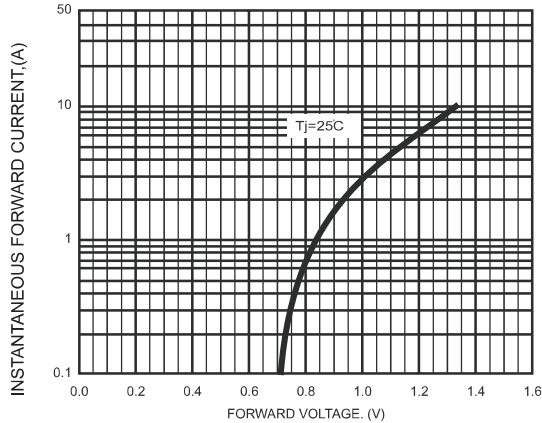


FIG.4-TYPICAL REVERSE CHARACTERISTICS

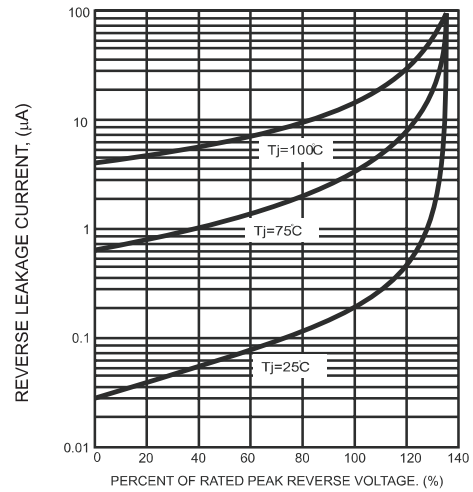
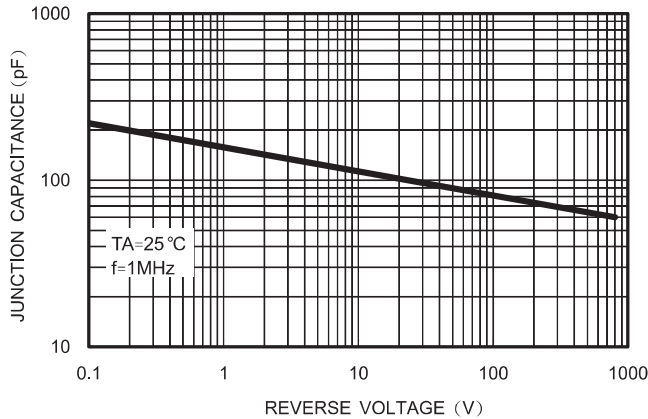
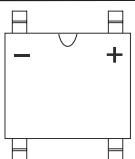
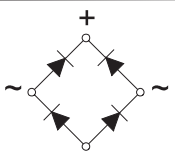


FIG.5-TYPICAL JUNCTION CAPACITANCE



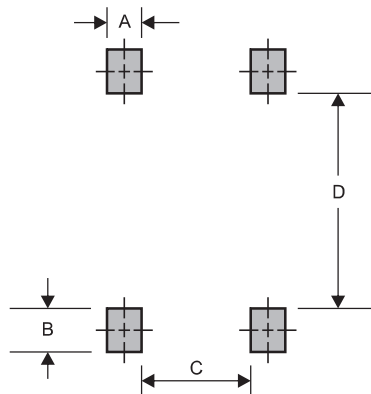
## Pinning information

| Simplified outline  | Symbol  |
|---|---|
|  |  |

## Marking

| Type number | Marking code |
|-------------|--------------|
| ABS22       | ABS22        |
| ABS24       | ABS24        |
| ABS26       | ABS26        |
| ABS28       | ABS28        |
| ABS210      | ABS210       |

## 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) |