

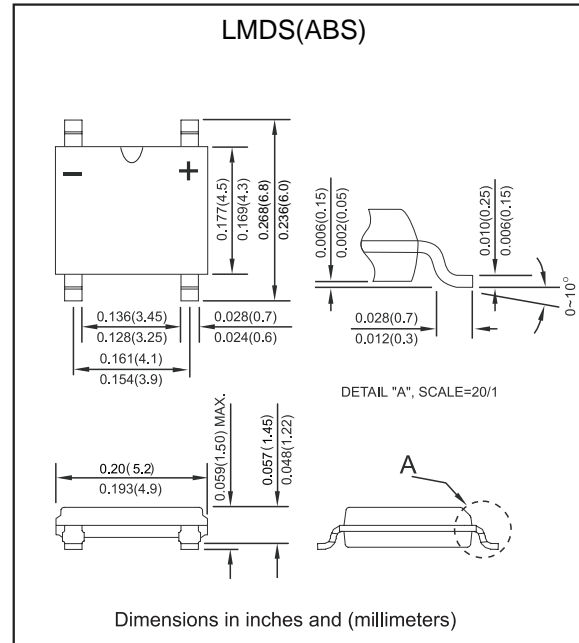
Features

- Surge overload ratings to 50 amperes peak.
- 2.0A rating in low profile surface mount mini-dip bridge save space on printed circuit board.
- Ideal for automated replacement.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Silicon eplana epitaxial chip, metal silicon junction.
- Lead-free parts meet RoHS requirements.
- 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 |
|-----------------------------------|---|-----------------|------|------|------|-----------------------------|
| Average Forward rectified current | See Fig.1 | I_{AV} | | | 2.0 | A |
| Peak Forward surge current | 8.3ms single half sine-wave (JEDEC methode) | I_{FSM} | | | 50 | A |
| Reverse current | $V_R = V_{RRM} T_J = 25^{\circ}\text{C}$ | I_R | | | 0.1 | mA |
| | $V_R = V_{RRM} T_J = 100^{\circ}\text{C}$ | | | | 10 | |
| Thermal resistance | Junction to ambient | $R_{\theta JA}$ | | 50 | | $^{\circ}\text{C}/\text{W}$ |
| Diode junction capacitance | $f=1\text{MHz}$ and applied 4V DC reverse voltage | C_J | | 20 | | pF |
| 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 ($^{\circ}\text{C}$) |
|---------|-----------------------|-----------------------|-------------------|-------------------|---|
| KABS22 | 20 | 14 | 20 | 0.55 | |
| KABS24 | 40 | 28 | 40 | | |
| KABS26 | 60 | 42 | 60 | 0.70 | |
| KABS28 | 80 | 56 | 80 | | |
| KABS210 | 100 | 70 | 100 | 0.85 | |
| KABS215 | 150 | 105 | 150 | | |
| KABS220 | 200 | 140 | 200 | 0.90 | |

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage
per element at 2.0A peak

Rating and characteristic curves

Fig. 1 Output Current Derating Curve

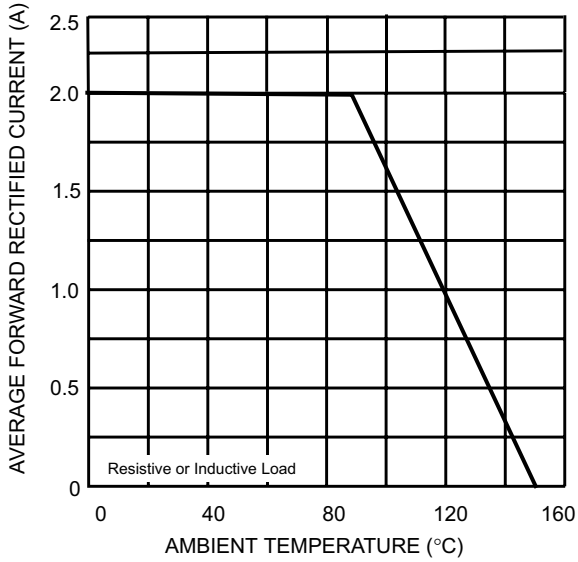


Fig. 2 Typical Forward Characteristics (per leg)

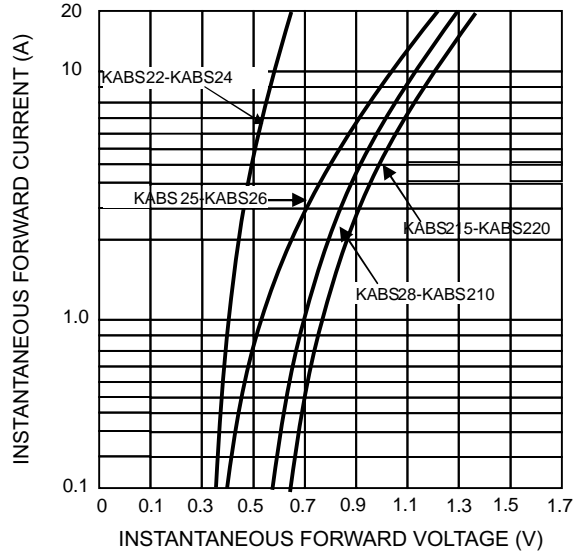


Fig. 3 Maximum Peak Forward Surge Current (per leg)

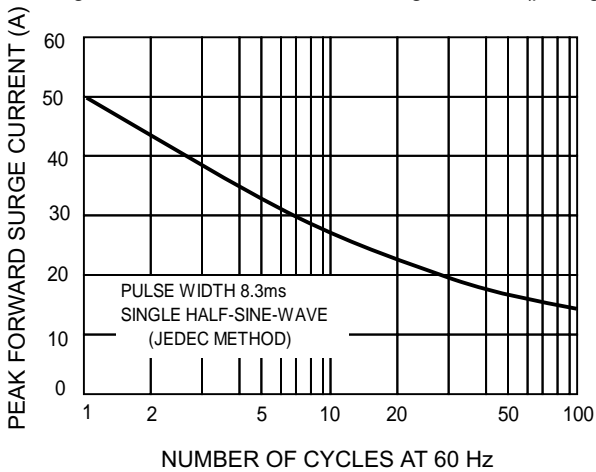


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

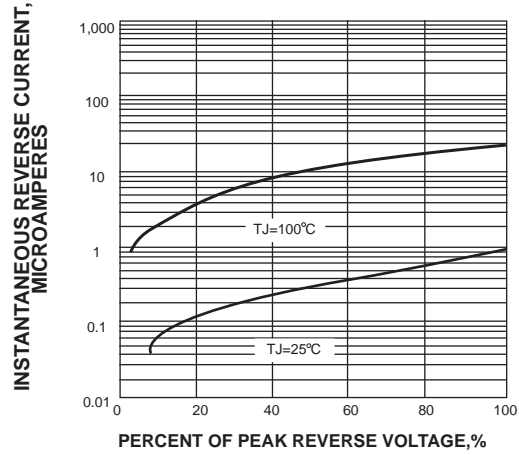
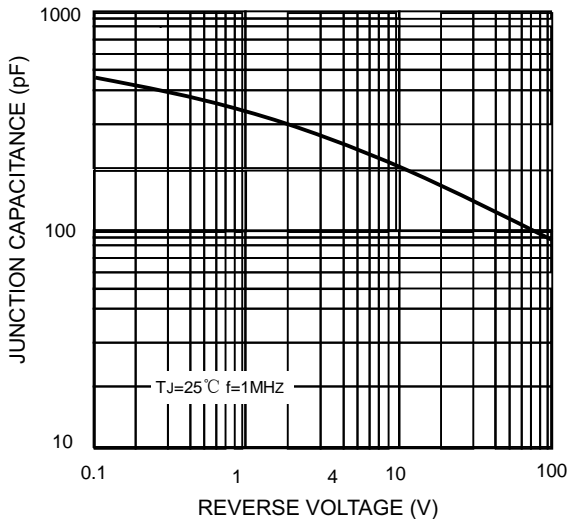
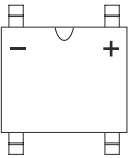
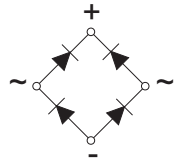


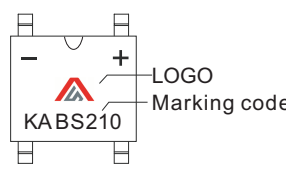
Fig. 5 Typical Junction Capacitance



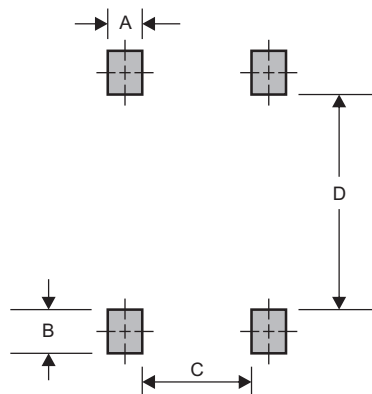
Pinning information

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

Marking

| Type number | Marking code | Example |
|-------------|--------------|---|
| KABS22 | KABS22 |  |
| KABS24 | KABS24 | |
| KABS26 | KABS26 | |
| KABS28 | KABS28 | |
| KABS210 | KABS210 | |
| KABS215 | KABS215 | |
| KABS220 | KABS220 | |

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) |