



ABS05 THRU ABS10

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

1.0 Ampere

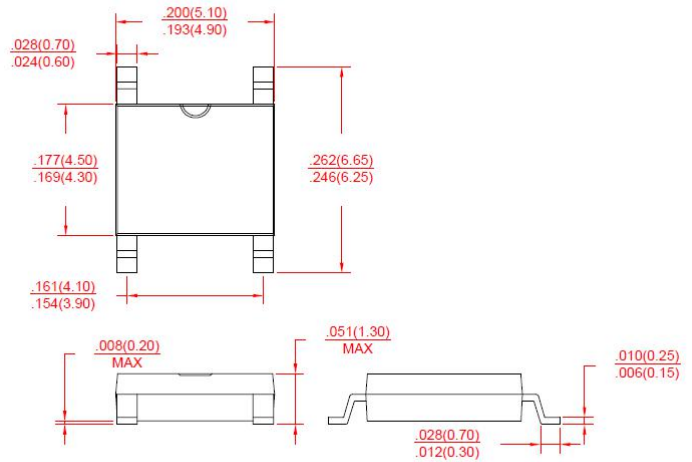
MINI-DIP

Features

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds at terminals

Mechanical Data

- Case: Molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Molded on body
- LeadP: Plated terminals solderable per MIL-STD-202E
method 208C
- Weight: 0.003 ounce, 0.10 grams



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

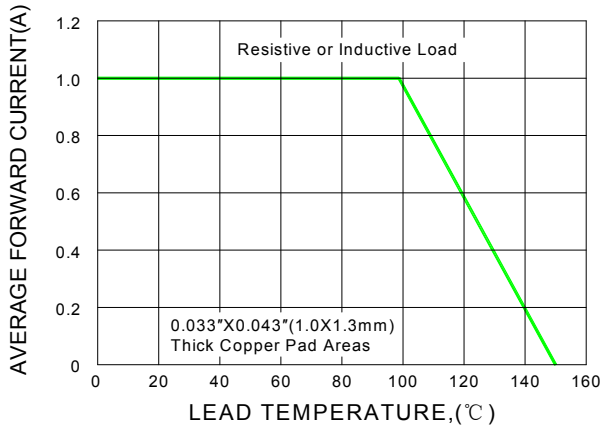
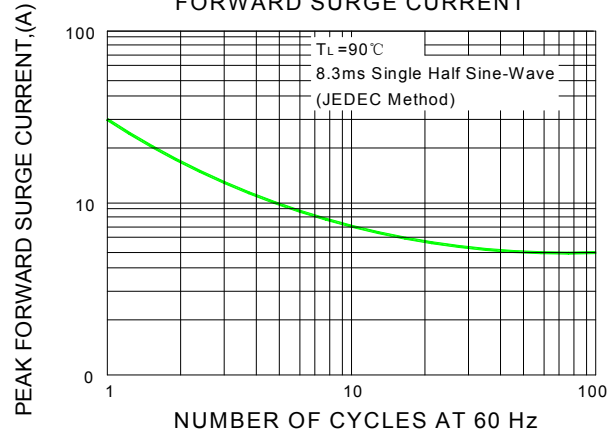
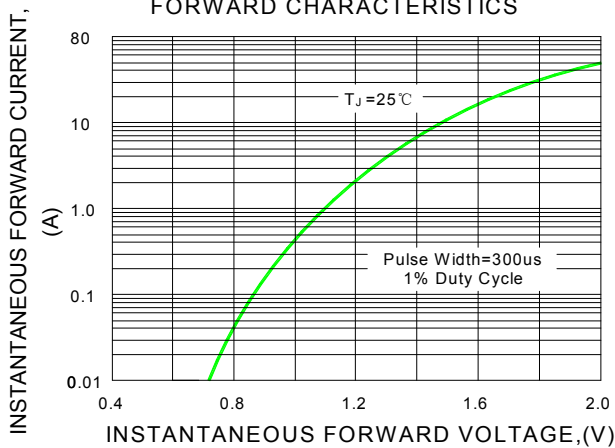
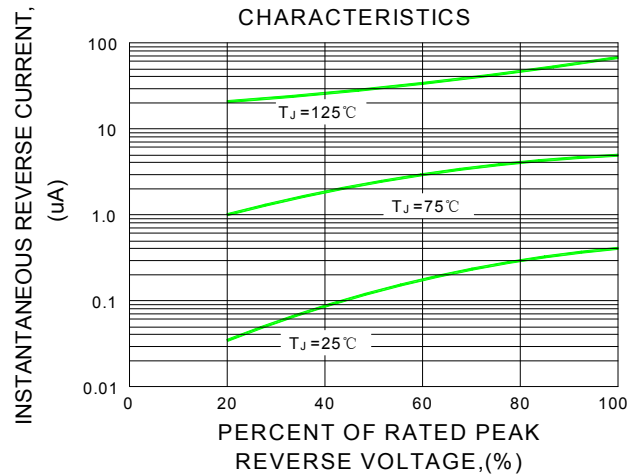
| TYPE NUMBER | SYMBOLS | AB S05 | AB S1 | AB S2 | AB S4 | AB S6 | AB S8 | AB S10 | UNIT |
|---|-----------------|-------------------------|----------|----------|----------|----------|----------|-----------|---------------------------|
| Maximum Reverse Peak Repetitive Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Output Current, 0.06"(1.5mm) lead length at $T_L=100^\circ\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | Amp s |
| Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30 | | | | | | | Amp s |
| Rating for Fusing ($t < 8.3\text{ms}$) | I^2t | 3.7 | | | | | | | A^2s |
| Maximum Instantaneous Forward Voltage drop Per Bridge element 1.0A | V_F | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at rated DC blocking voltage per element | I_R | $T_A=25^\circ\text{C}$ | | | | | | | μAmp s |
| | | $T_A=125^\circ\text{C}$ | | | | | | | |
| Typical Junction Capacitance (NOTE 1) | C_J | 25 | | | | | | | pF |
| Typical Thermal Resistance (NOTE 2) | $R_{\theta JA}$ | 70 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating and Storage Temperature Range | T_J, T_{STG} | (-55 to +150) | | | | | | | $^\circ\text{C}$ |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C.B. with 0.033"x0.043"(1.00mm×1.30mm) copper pads.



Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

F1G.1-FORWARD CURRENT DERATING CURVE**F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT****F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS****F1G.4-TYPICAL REVERSE CHARACTERISTICS****F1G.5-TYPICAL JUNCTION CAPACITANCE**