

SILICON BRIDGE RECTIFIER

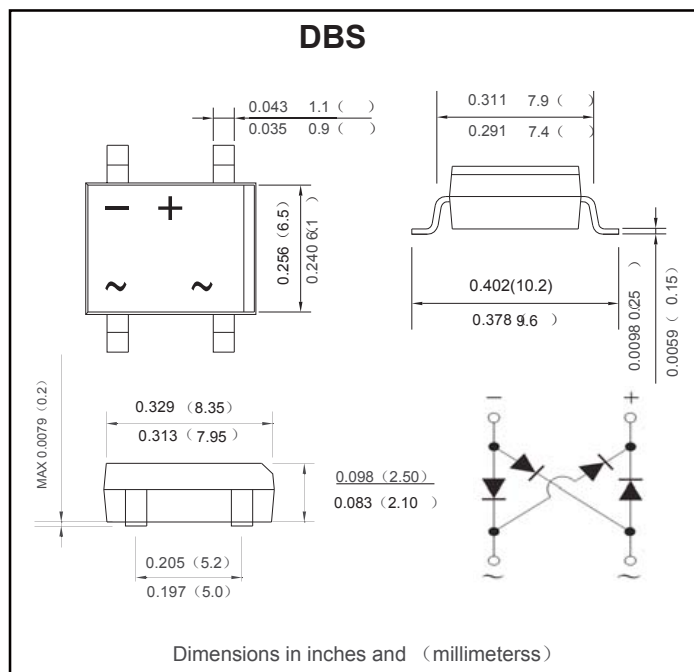
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
- High temperature soldering guaranteed :260 C/ 10s seconds at terminals
- Component in accordance to ROHS 2002/95/EC and WEEE2002/96/EC

MECHANICAL DATA

- Case:DBS molded plastic body
- Epoxy:UL94V-0 rate flame retardant
- Terminals:Plated leads solderable per MIL-STD-750,method 2026
- Mounting position:Any

REVERSE VOLTAGE : 50 — 1000 V CURRENT: 1.5A



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

| | Symbols | DB151 | DB152 | DB153 | DB154 | DB155 | DB156 | DB157 | Units |
|--|---------------------------------|-------------|-------|-------|-------|-------|-------|-------|------------------|
| Maximum Recurrent Peak Reverse 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 Current | $I(AV)$ | 1.5 | | | | | | | Amp |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 50 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage at 1.5 A DC | V_F | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at rated DC blocking voltage | $T_A=25\text{ }^\circ\text{C}$ | 10 | | | | | | | μA |
| | $T_A=125\text{ }^\circ\text{C}$ | 500 | | | | | | | |
| Typical junction capacitance(Note 1) | C_J | 25 | | | | | | | pF |
| Typical thermal resistance(Note 2) Operating junction and storage temperature range | $R_{\theta JA}$ | 40 | | | | | | | K/W |
| | T_J T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

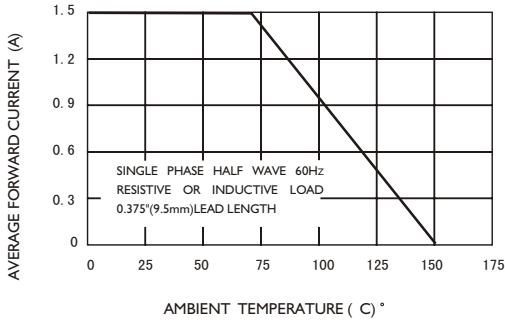


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

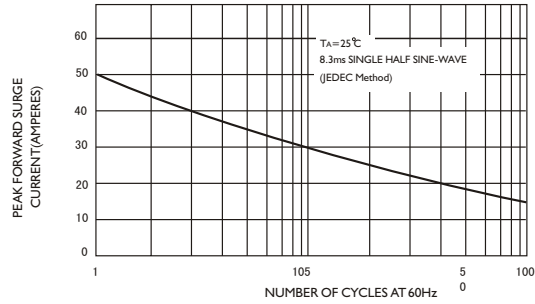


FIG.3-TYPICAL JUNCTION CAPACITANCE

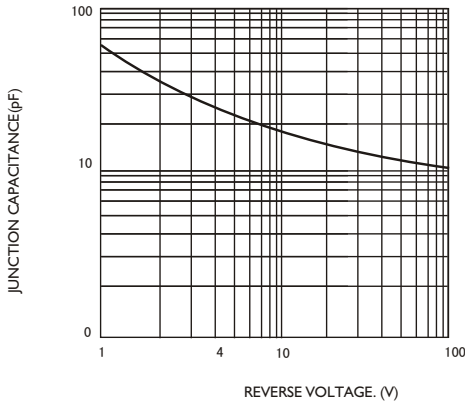


FIG.4-TYPICAL FORWARD CHARACTERISTICS

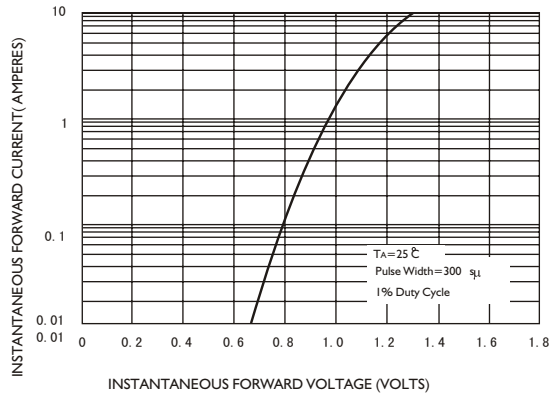


FIG.5-TYPICAL REVERSE CHARACTERISTICS

