



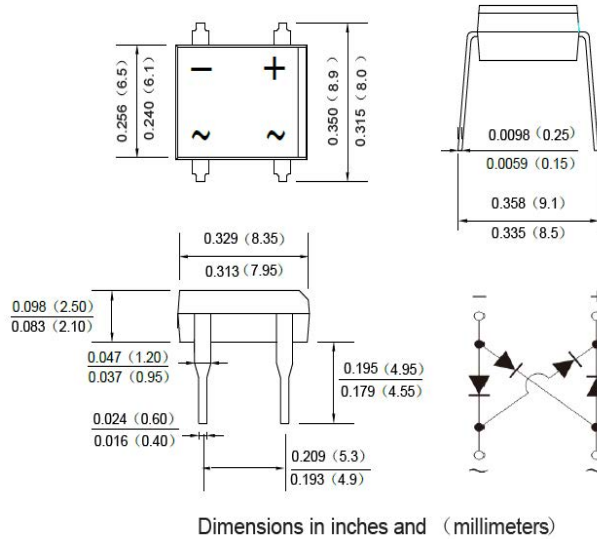
Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: DB-M, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version

DB-M



Maximum Ratings and Electrical Characteristics

Rating 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 | SYMBOL | UDB151 | UDB152 | UDB153 | UDB154 | UDB155 | UDB156 | UDB157 | UNITS |
|---|------------------|---------------------------------|--------|--------|-----------|--------|--------|--------|----------------|
| | | Peak Repetitive Reverse Voltage | VRRM | | | | | | |
| Working Peak Reverse Voltage DC | VRWM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Blocking Voltage | VDC | | | | | | | | |
| RMS Reverse Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1)@TC=100°C | IF(AV) | 1.5 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 55 | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | I ² T | 12.554 | | | | | | | A ² |
| Forward Voltage per element @IF=1.5A | VFM | | 1.0 | | 1.3 | | 1.7 | | V |
| Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=125°C | IR | | | | 5.0 | | | | uA |
| | | | | | 200 | | | | |
| Maximum reverse recovery time (Note 3) | TRR | | 50 | | | | 75 | | ns |
| Typical Junction Capacitance per leg (Note 2) | CJ | | | | 25 | | | | pF |
| Typical Thermal Resistance per leg | RθJA | | | | 40 | | | | °C/W |
| | RθJL | | | | 15 | | | | |
| Operating and Storage Temperature Range | TJ,TSTG | | | | -55to+150 | | | | °C |

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



Fig. 1 Output Current Derating Curve

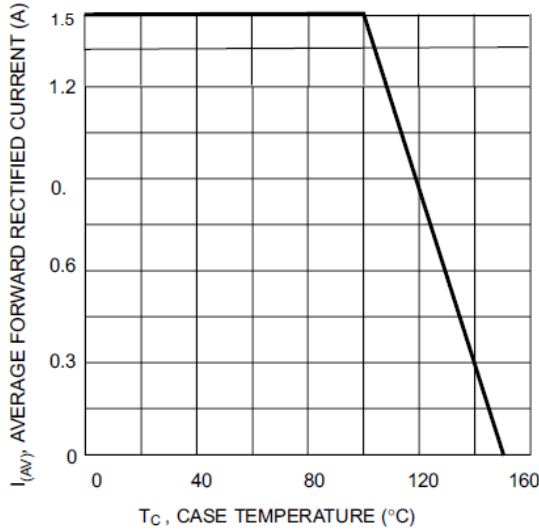


Fig. 2 Typical Forward Characteristics (per leg)

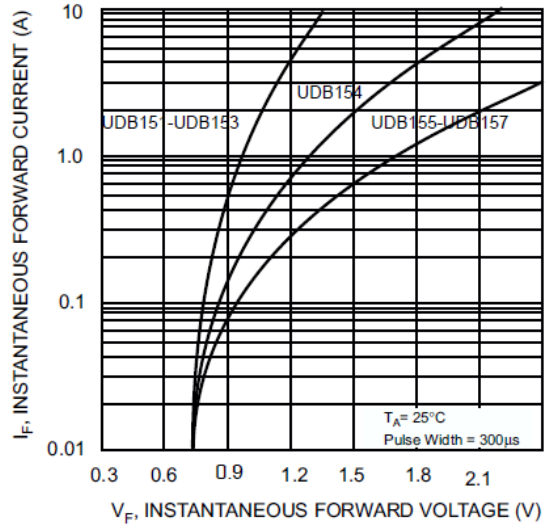


Fig. 3 Maximum Peak Forward Surge Current (per leg)

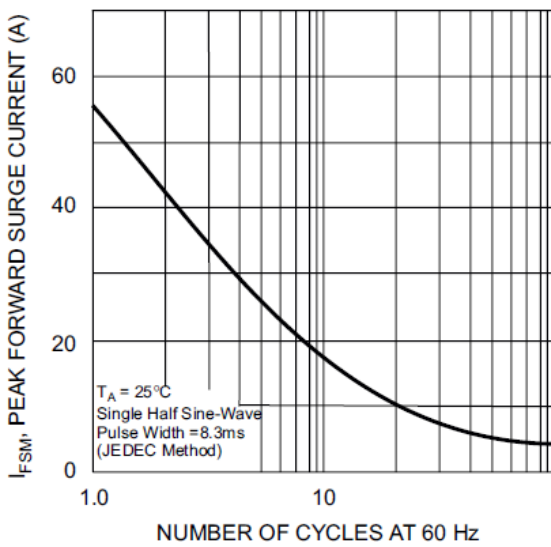


Fig. 4 Typical Reverse Characteristics (per element)

