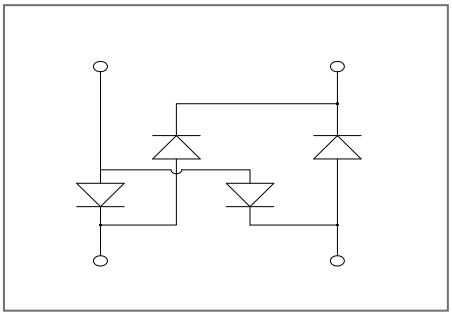
# Low VF Bridge Rectifiers



## Features

- UL recognition, file #E313149
- Glass passivated chip junction
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

## Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

## Mechanical Data

- **Package**: YBS3
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen-free
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

## ■Maximum Ratings ($T_a$=25 Unless otherwise specified

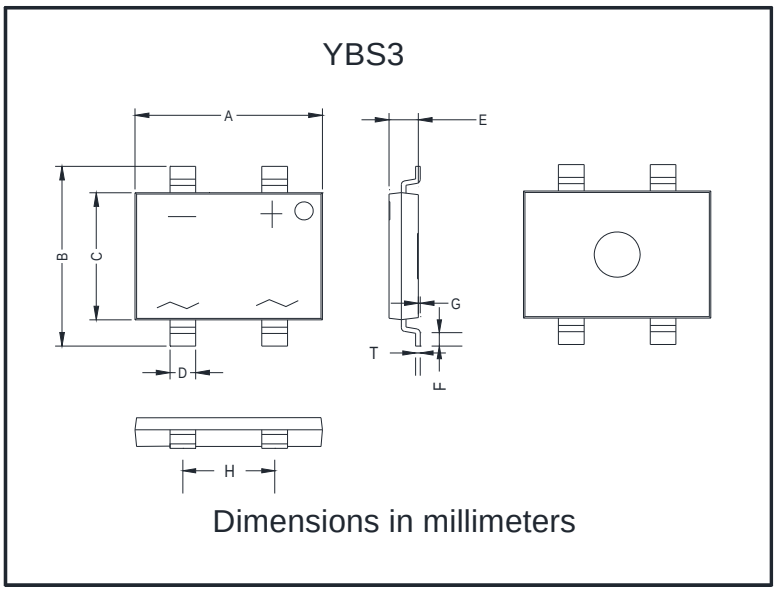
| PARAMETER | SYMBOL | UNIT | YBSML6006 | YBSML6008 |
|---|---|---|---|---|
| Device marking code | | | YBSML6006 | YBSML6008 |
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | 600 | 800 |
| Maximum RMS Voltage | $V_{RMS}$ | V | 420 | 560 |
| Maximum DC blocking Voltage | $V_{DC}$ | V | 600 | 800 |
| Average rectified output current @60Hz sine wave, R-load, Tc=110 | $I_O$ | A | 6.0 | |
| Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25 | $I_{FSM}$ | A | 200 | |
| Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25 | | | 400 | |
| Current squared time @1ms≤t≤8.3ms Tj=25 Rating of per diode | $I^2t$ | $A^2s$ | 166 | |
| Storage temperature | $T_{stg}$ | | -55 ~ +150 | |
| Junction temperature | $T_j$ | | -55 ~ +150 | |

## ■Electrical Characteristics $T_a$=25 Unless otherwise specified

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | Min | Typ | Max |
|---|---|---|---|---|---|---|
| Instantaneous forward voltage drop per diode | $V_F$ | V | $I_{FM}$=3.0A | 0.7 | 0.875 | 0.92 |
| DC reverse current at rated DC blocking voltage per diode | $I_R$ | μA | $T_j$=25 | - | 0.18 | 5 |
| | | | $T_j$=125 | - | 50 | 100 |
| Junction capacitance | Cj | pF | Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C | 28 | 55 | 110 |

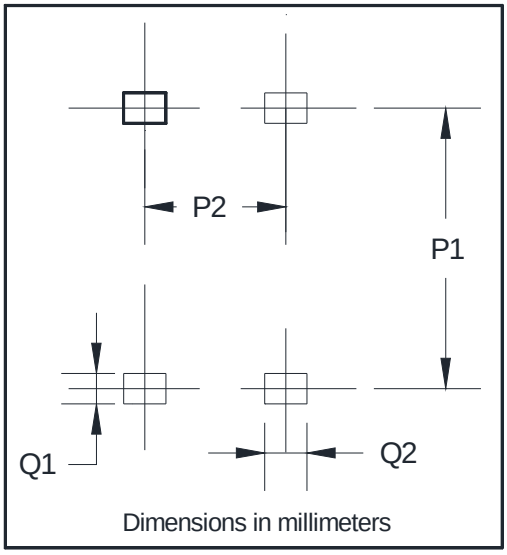
■**Thermal Characteristics** $T_a$

## ■ Outline Dimensions




| YBS3 | | |
|---|---|---|
| **Dim** | **Min** | **Max** |
| A | 10.00 | 10.40 |
| B | 9.70 | 10.10 |
| C | 6.80 | 7.20 |
| D | 1.3 | 1.5 |
| E | 1.4 | 1.8 |
| F | 0.5 | 1.1 |
| G | 0 | 0.15 |
| H | 4.9 | 5.1 |
| T | 0.20 | 0.30 |

## ■ Suggested pad layout




| YBS3 | |
|---|---|
| **Dim** | **Min** |
| P1 | 9.25 |
| P2 | 5.00 |
| Q1 | 1.00 |
| Q2 | 1.5 |

## Disclaimer

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