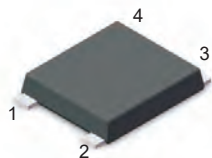


## Ultrasoft Recovery Bridge



LSB Package

### PINNING

| PIN | DESCRIPTION        |
|-----|--------------------|
| 1   | Input Pin (~)      |
| 2   | Input Pin (~)      |
| 3   | Output Anode (+)   |
| 4   | Output Cathode (-) |

### Features

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 8A
- High Surge Current Capability
- Designed For Surface Mount Application

### Benefits

- Case: LSB
- Terminals: Solderable Per MIL-STD-750
- Reduced EMI, Reduced power loss and switching transist

### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

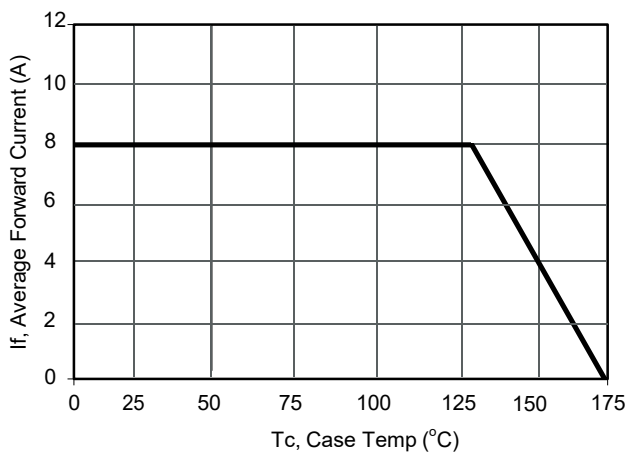
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter                                                                                         | Symbols                                | WRLSB80M   | Units            |
|---------------------------------------------------------------------------------------------------|----------------------------------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage                                                           | VRRM                                   | 1000       | V                |
| Maximum RMS voltage                                                                               | VRMS                                   | 700        | V                |
| Maximum DC Blocking Voltage                                                                       | VDC                                    | 1000       | V                |
| Average Rectified Output Current                                                                  | I <sub>o</sub>                         | 8          | A                |
| Reverse Recovery Time.<br>IF=0.5A,IR=1A,IRR=0.25A                                                 | T <sub>rr</sub>                        | 10         | us               |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | IFSM                                   | 200        | A                |
| I <sup>2</sup> t rating for fusing ( 1ms< t < 10ms)                                               | I <sup>2</sup> t                       | 166        | A <sup>2</sup> S |
| Maximum Forward Voltage at 4.0 A                                                                  | V <sub>F</sub>                         | 1.0        | V                |
| Maximum DC Reverse Current @TA=25 °C<br>at Rated DC Blocking Voltage @TA=125 °C                   | I <sub>R</sub>                         | 5<br>100   | μA               |
| Typical Junction Capacitance (Note1)                                                              | C <sub>j</sub>                         | 50         | pF               |
| Operating and Storage Temperature Range                                                           | T <sub>j</sub> , T <sub>stg</sub>      | -55 ~ +150 | °C               |
| Typical thermal resistance (Note 2)                                                               | R <sub>thJC</sub><br>R <sub>thJA</sub> | 16<br>60   | °C/W             |

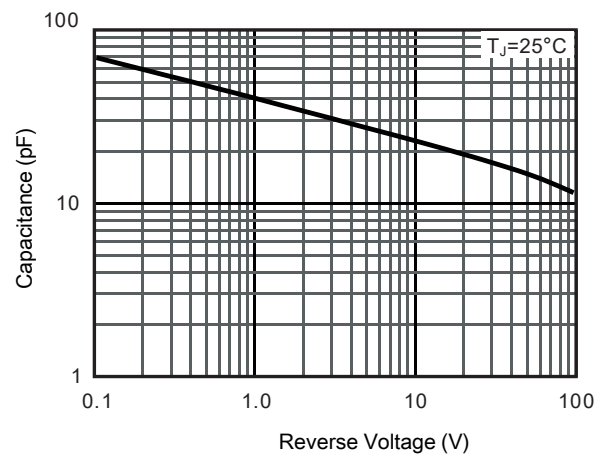
Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Mounted on glass epoxy PC board with 4 × 1.5" × 1.5" (3.81 × 3.81 cm) copper pad.

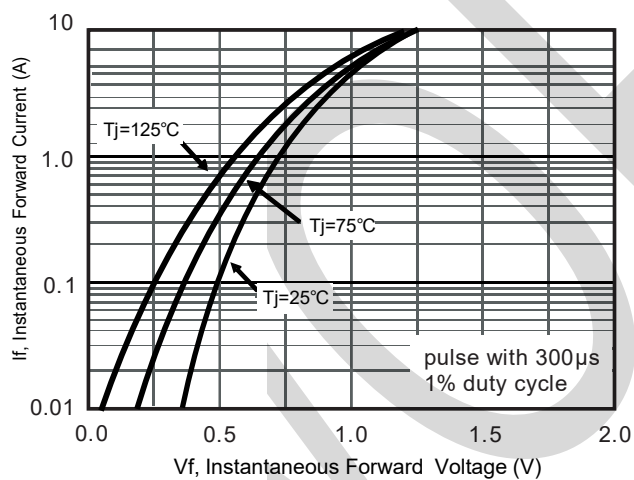
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



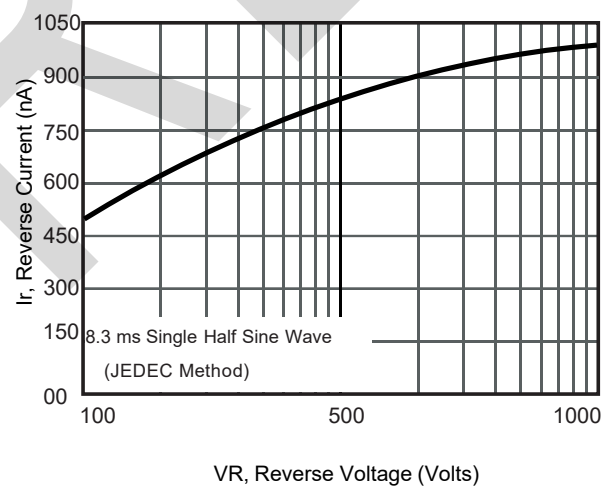
Current Derating, Case



Typical Junction Capacitance



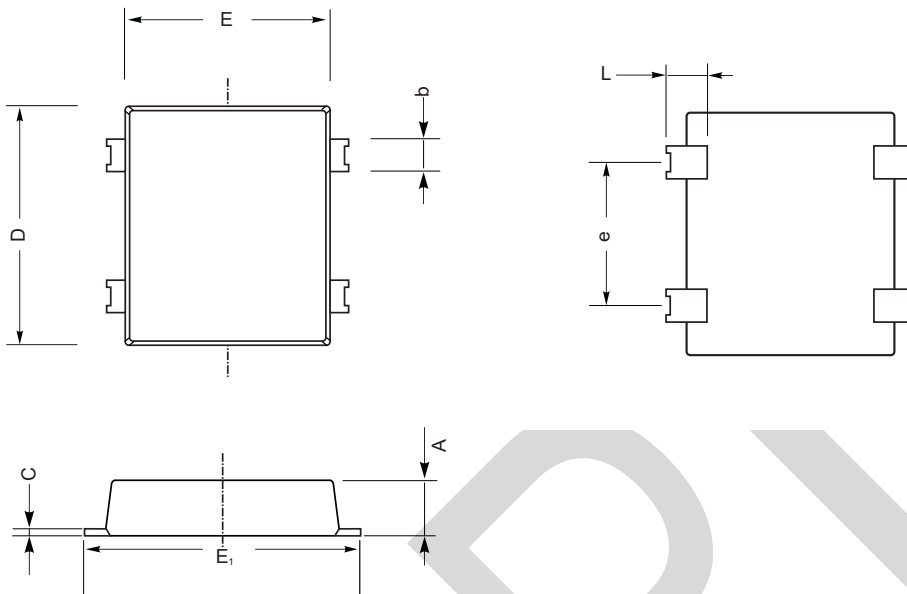
Typical Forward Voltage



Typical Reverse Current

## PACKAGE OUTLINE DIMENSIONS

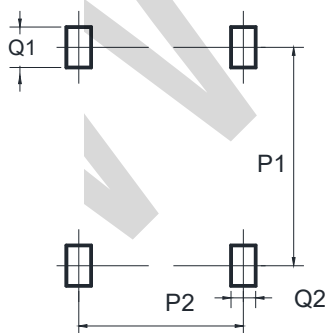
### LSB



### LSB mechanical data

| UNIT |     | A    | C    | D   | E   | E <sub>1</sub> | L    | e   | b    |
|------|-----|------|------|-----|-----|----------------|------|-----|------|
| mm   | max | 1.75 | 0.55 | 9.8 | 8.8 | 10.2           | 1.25 | 5.3 | 1.55 |
|      | min | 1.35 | 0.25 | 9.4 | 8.4 | 9.8            | 0.85 | 4.9 | 1.25 |
| mil  | max | 68   | 21.6 | 385 | 346 | 401            | 49   | 209 | 61   |
|      | min | 53   | 9.8  | 370 | 330 | 385            | 33   | 193 | 49   |

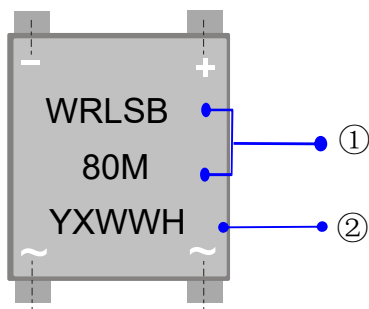
### LSB Suggested Pad Layout



| UNIT |     | P1    | P2    | Q1   | Q2   |
|------|-----|-------|-------|------|------|
| mm   | min | 10.0  | 5.10  | 1.5  | 1.8  |
| mil  | min | 393.7 | 200.8 | 59.1 | 70.9 |

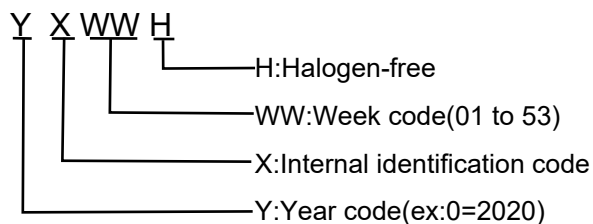
Dimensions is millimeters

## Marking Information



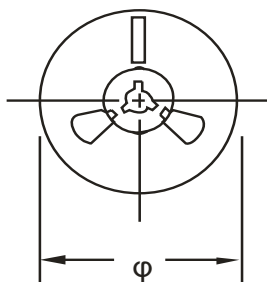
①Product model : WRLSB80M

②PDC information :

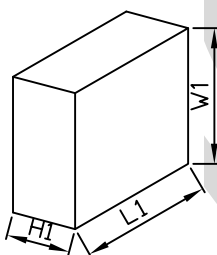


## Packaging Information

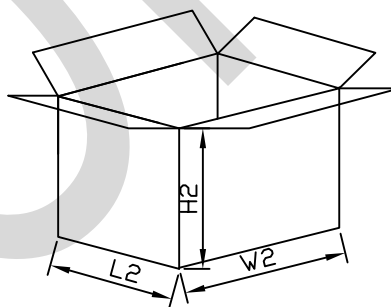
### 1.Reel Dimensions



### 2.Inside Box



### 3.Outside Box



## Packaging Information

| NO   | UNIT                                                          | Reel Dimensions               |     |    | Inside Box               |     |    | Outside Box                      |     |     |
|------|---------------------------------------------------------------|-------------------------------|-----|----|--------------------------|-----|----|----------------------------------|-----|-----|
| Size | mm                                                            | φ                             | A   | B  | L1                       | W1  | H1 | L2                               | W2  | H2  |
|      |                                                               | 330                           | 100 | 22 | 335                      | 335 | 52 | 360                              | 360 | 270 |
| QTY  | PCS                                                           | Smallest package,3000PCS/reel |     |    | 6,000PCS,2 reel in total |     |    | 30,000PCS/carton,5boxes in total |     |     |
| Note | Tolerance    ≤20mm,±3mm;    21-100mm,±5mm;    101-500mm,±10mm |                               |     |    |                          |     |    |                                  |     |     |