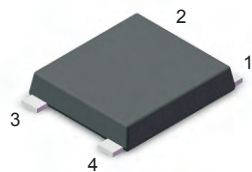


## Ultrasoft Recovery Bridge



LSB Package

### PINNING

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

### Features

- Ultrasoft recovery
- low  $I_{RRM}$
- low VF
- High  $V_{RRM}$
- Special frame design for heat dissipation

### Benefits

- Reduced EMI
- Reduced power loss and switching transistor
- Reduced snubbing

### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

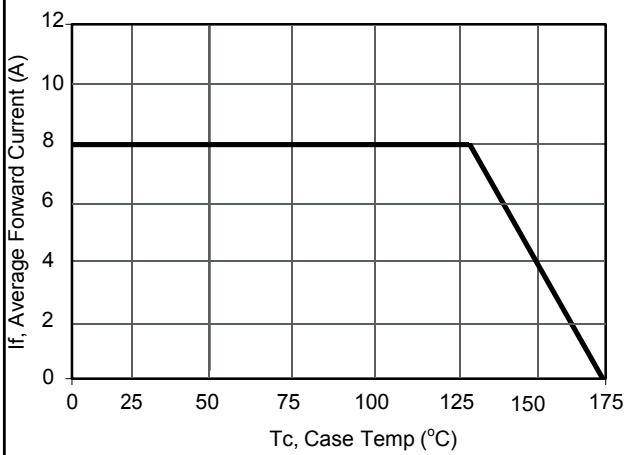
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	WRLSB80M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Average Rectified Output Current	$I_O$	8.0	A
Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	$T_{rr}$	10	us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	200	A
$I^2 t$ rating for fusing (1ms < t < 10ms)	$I^2 t$	200	A <sup>2</sup> S
Forward Voltage at 4.0 A	$V_F$	Type 0.90	V
		Max 1.0	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	@ $T_A=25\text{ }^\circ\text{C}$	5
		@ $T_A=125\text{ }^\circ\text{C}$	100
Typical Junction Capacitance ( Note1 )	$C_j$	50	pF
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175	°C

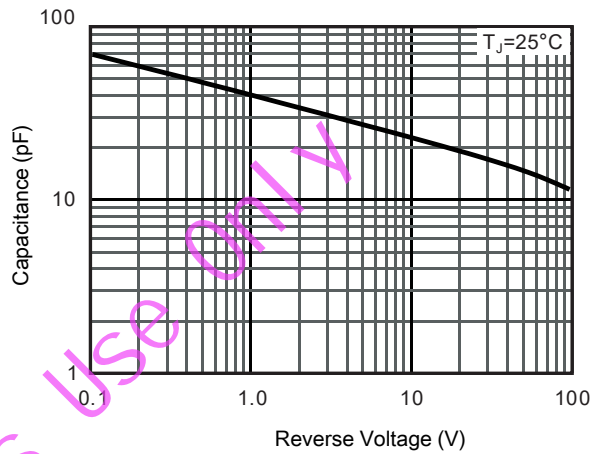
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

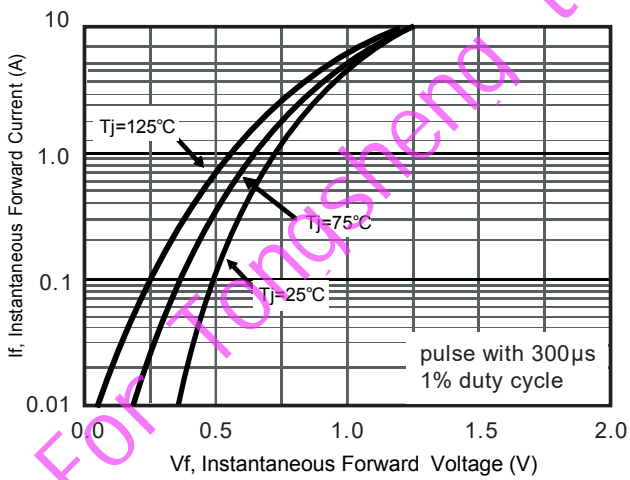
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



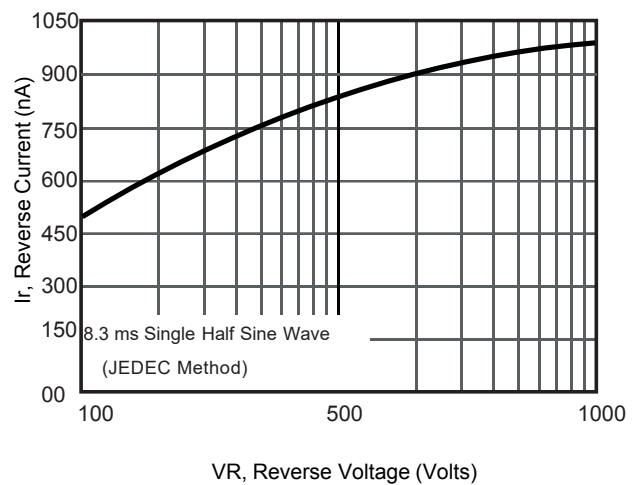
Current Derating, Case



Typical Junction Capacitance



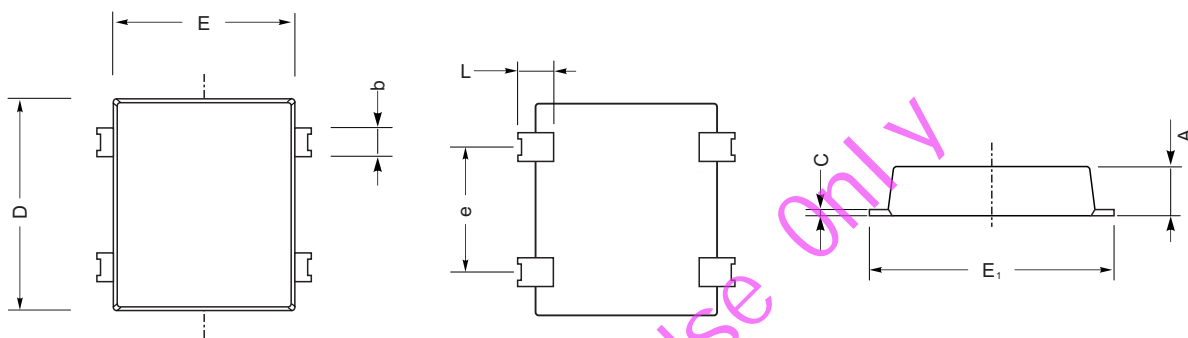
Typical Forward Voltage



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