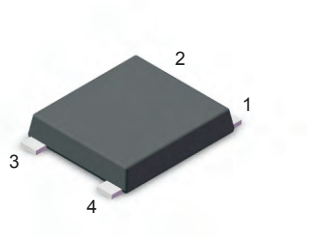
Ultrasoft Recovery Bridge



LSB Package

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

PINNING

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

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

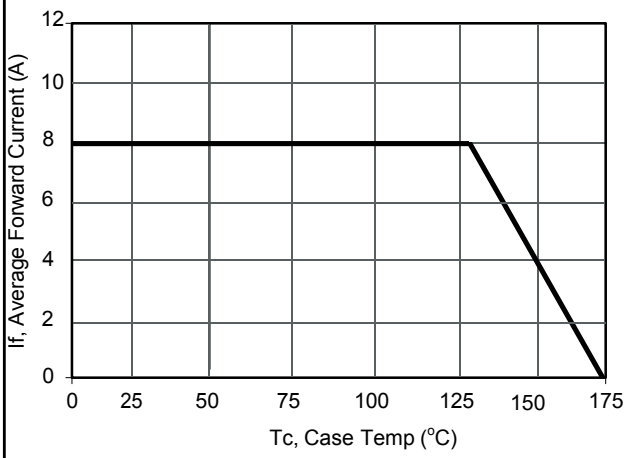
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

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.IF=0.5A,IR=1A,IRR=0.25A	Trr	10	us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200	A
I^2t rating for fusing (1ms< t < 10ms)	I^2t	200	A^2S
Forward Voltage at 4.0 A	V_F	Type 0.90 Max 1.0	V
Maximum DC Reverse Current @T_A=25 °C at Rated DC Blocking Voltage @T_A=125 °C	I_R	5 100	μA
Typical Junction Capacitance (Note1)	C_j	50	pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +175	°C

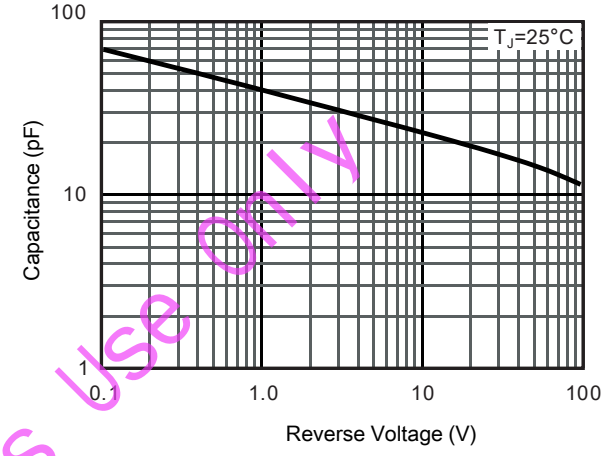
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

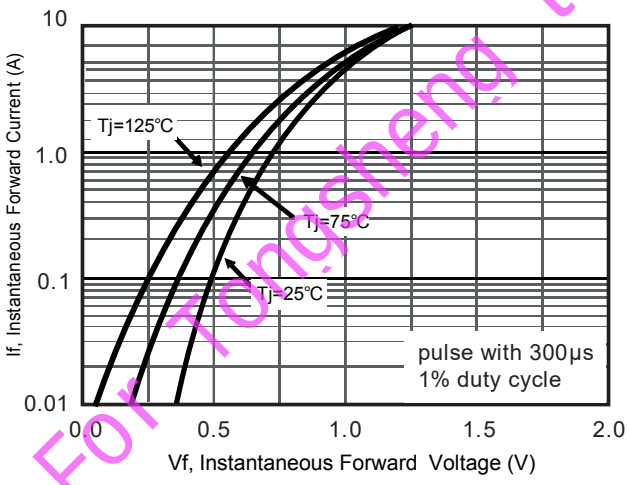
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



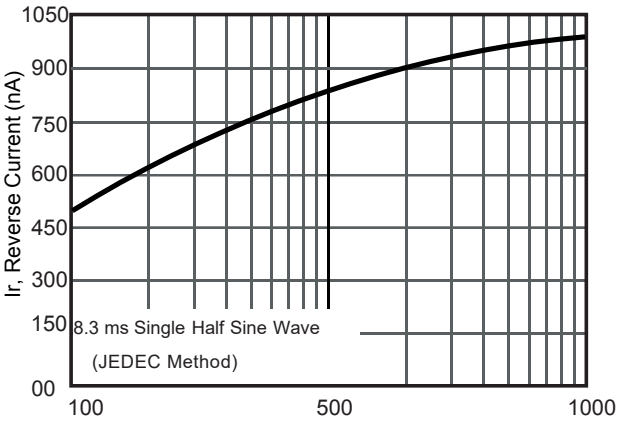
Current Derating, Case



Typical Junction Capacitance



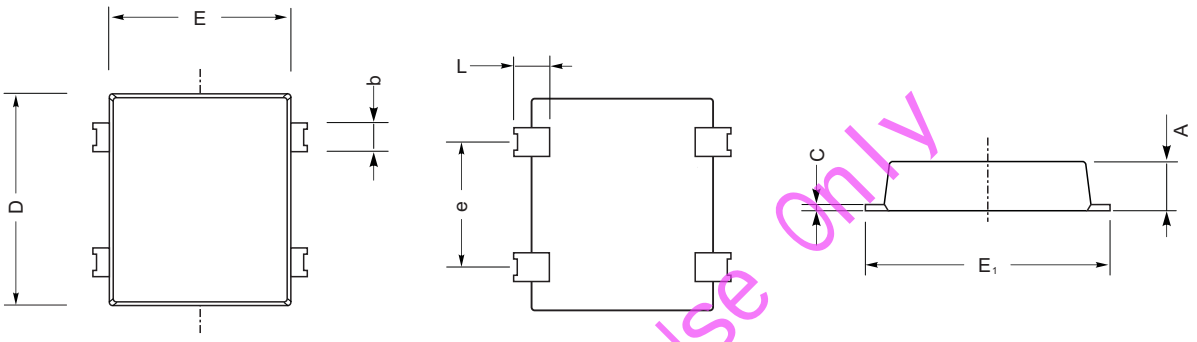
Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS

LSB



LSB mechanical data

UNIT		A	C	D	E	E_1	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