

## Ultrasoft Recovery Bridge



ABS 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 - 1.5 A
- Ultrasoft recovery
- Designed For Surface Mount Application

### Benefits

- Case: ABS
- Terminals: Solderable Per MIL-STD-750
- Approx. Weight: 82mg 0.0029oz

### 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 %.

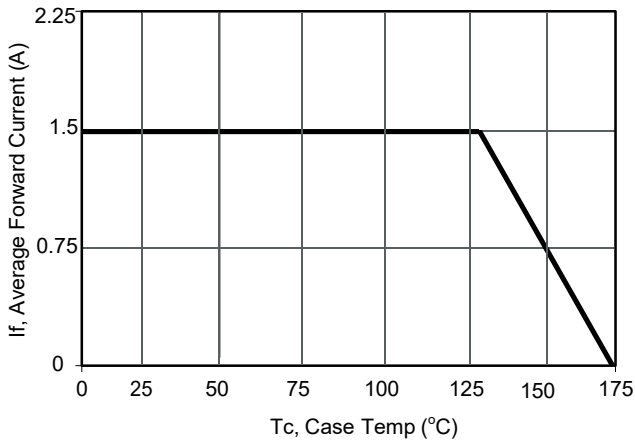
Parameter	Symbols	WRABS15M	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Average Rectified Output Current	I <sub>o</sub>	1.5	A
Reverse Recovery Time. IF=0.5A,IR=1A,IRR=0.25A	T <sub>rr</sub>	10	us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	50	A
I <sup>2</sup> t rating for fusing ( 1ms< t < 10ms)	I <sup>2</sup> t	15	A <sup>2</sup> S
Maximum Forward Voltage at 0.75 A	V <sub>F</sub>	1.0	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I <sub>R</sub>	5 100	μA
Typical Junction Capacitance (Note1)	C <sub>j</sub>	40	pF
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 ~ +175	°C
Typical thermal resistance (Note 2)	R <sub>thJC</sub> R <sub>thJA</sub>	16 60	°C/W

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

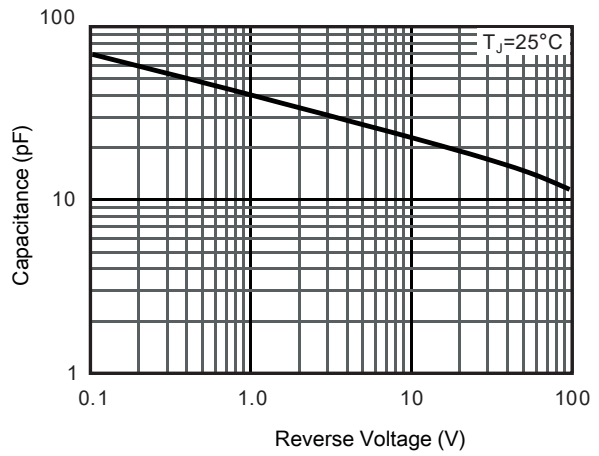
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft<sup>2</sup> 20x20 mm copper pad per pin with heatsink

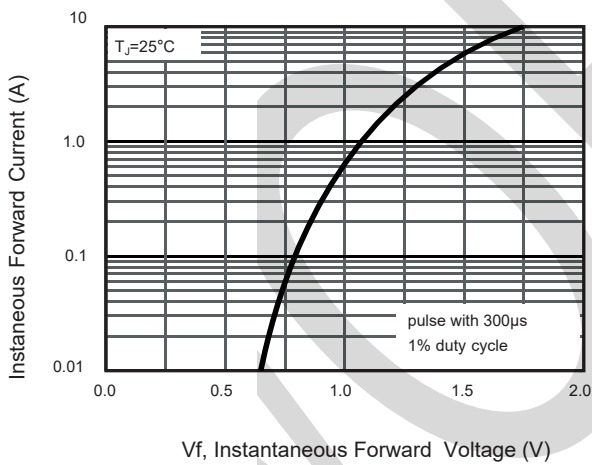
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



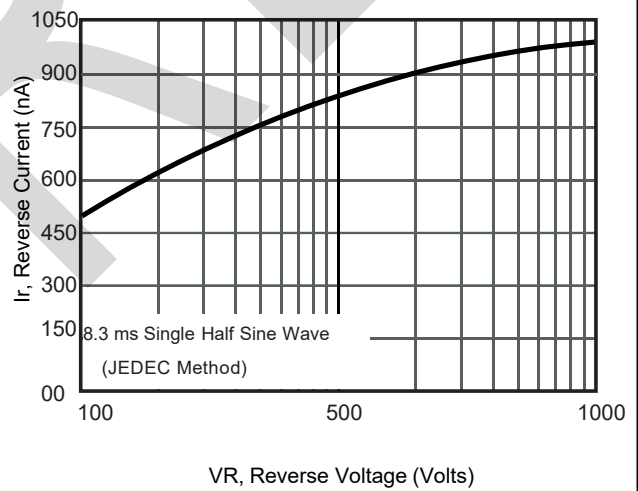
Current Derating, Case



Typical Junction Capacitance

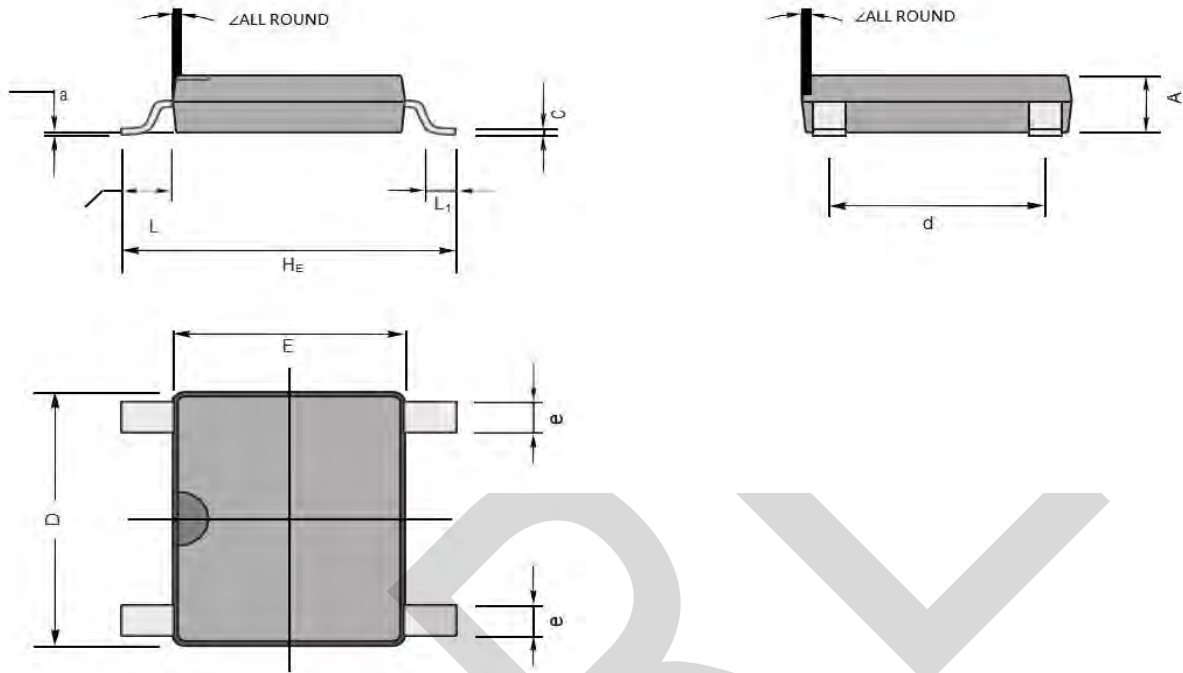


Typical Forward Voltage



Typical Reverse Current

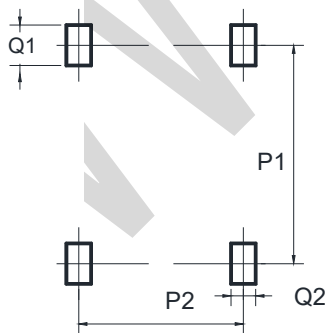
## PACKAGE OUTLINE DIMENSIONS



## ABS mechanical data

UNIT		A	C	D	E	HE	d	e	L	L <sub>1</sub>	a	∠
mm	max	1.5	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.2	0.15	4.9	4.2	6.0	3.8	0.5				
mil	max	59.1	8.66	205	177	252	165	27.55	37.40	23.62	7.87	
	min	47.23	5.91	193	166	236	149	19.68				

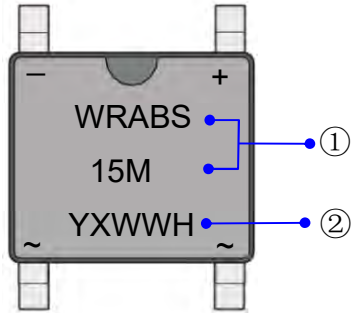
## ABS Suggested Pad Layout



Dimensions is millimeters

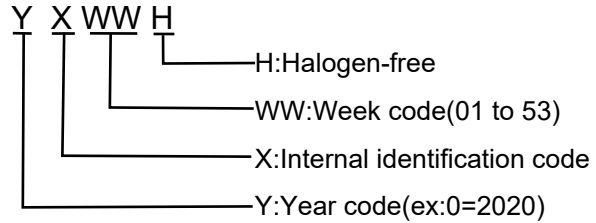
UNIT		P1	P2	Q1	Q2
mm	min	5.70	4.00	1.0	0.9
mil	min	224.40	157.48	39.37	35.43

## Marking Information



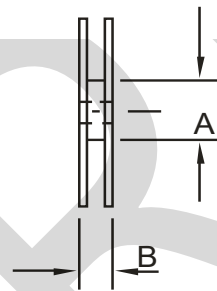
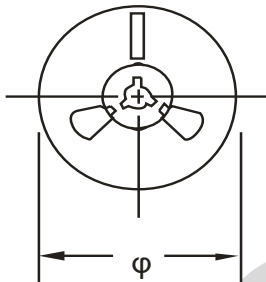
① Product model : WRABS15M

② PDC information:

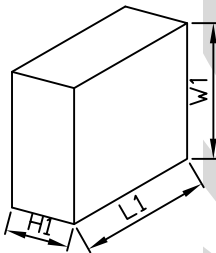


## Packaging Information

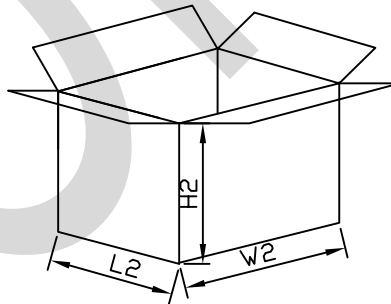
### 1. Reel Dimensions



### 2. Inside Box



### 3. Outside Box



## Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
		φ	A	B	L1	W1	H1	L2	W2	H2
Size	mm	330	100	15	335	335	43	360	360	270
QTY	PCS	Smallest package, 5000PCS/reel			10,000PCS, 2 reel in total			60,000PCS/carton, 6boxes in total		
Note		Tolerance ≤20mm, ±3mm;			21-100mm, ±5mm;			101-500mm, ±10mm		