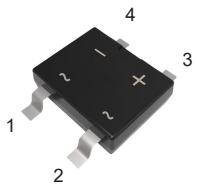
Shenzhen World Industrial Co.,Ltd. Soft-Bridge®

WRABS30J

01-Jul-2026

Ultrasoft Recovery Bridge

VF:0.77V@1A/125°C



ABS Package

PINNING

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

Features

- Reverse Voltage - 600 V
- Iorward Current - 3.0 A
- Compliant with RoHS Provisions
- High forward surge current capability

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

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	WRABS30J	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Average Rectified Output Current	I_o	3.0	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}	85	A
I^2t rating for fusing (1ms< t < 8.3ms)	I^2t	29.9	A^2S
Maximum Forward Voltage at 1.5 A	VF	1.0	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	IR	10 500	μA
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C
Typical thermal resistance (Note 1)	$R_{\theta JC}$	16	°C/W
	$R_{\theta JA}$	45	

Note: 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.

Ratings And Characteristics Curves (TA = 25 ˚C unless otherwise noted)

Fig.1 Current Derating, Case

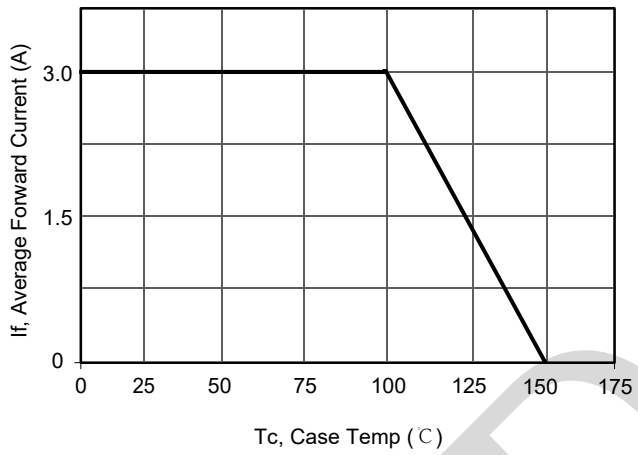


Fig.2 Maximum Non-Repetitive Peak Forward Surage Current

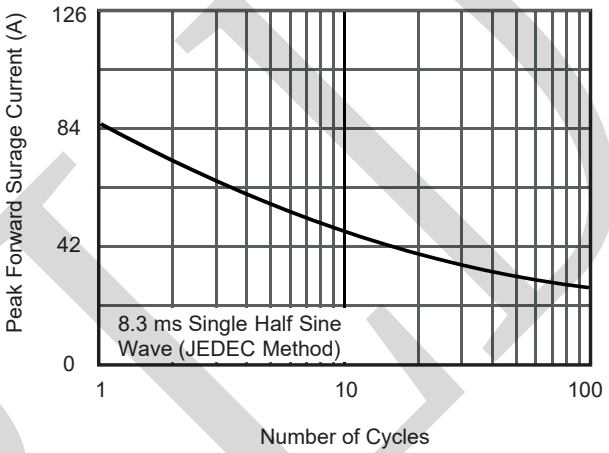


Fig.3 Typical Forward Voltage

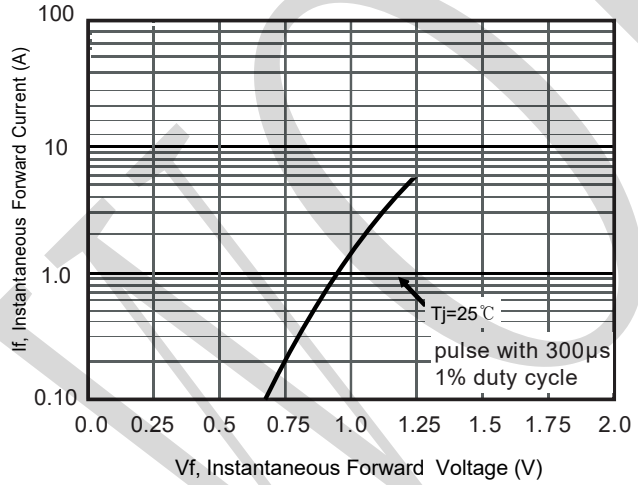
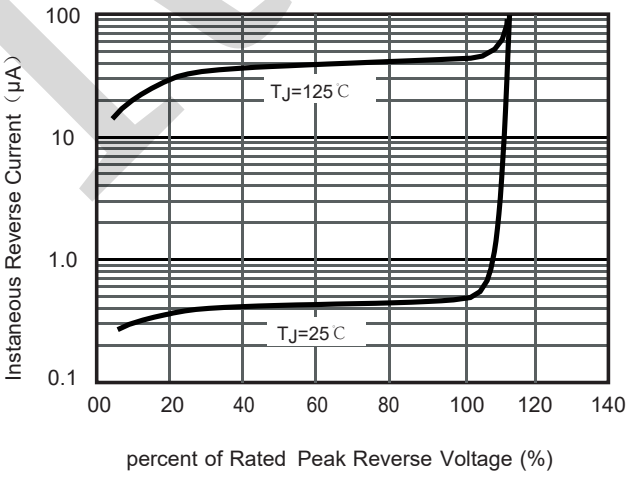
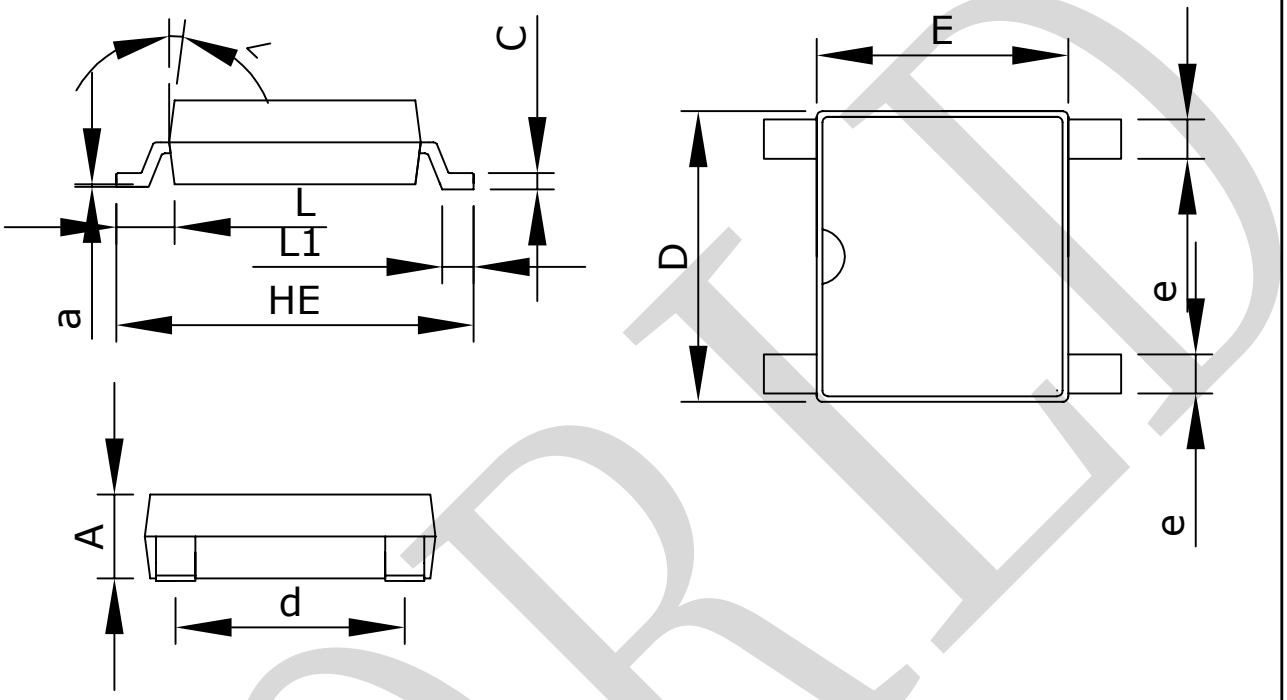


Fig.4 Typical Reverse Characteristics



Package Outline Dimensions

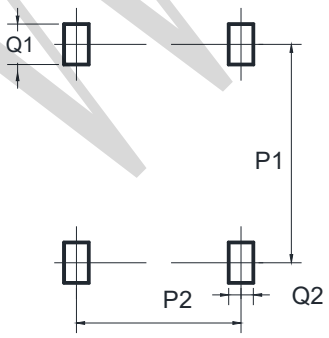
Note:unit In(mm)



ABS mechanical data

UNIT		A	C	D	E	HE	d	e	L	L_1	a	∠
mm	max	1.5	0.22	5.2	4.5	6.4	4.2	0.7	1.0	0.7	0.3	7°±3°
	min	1.0	0.15	4.9	4.2	6.0	3.8	0.5	0.9	0.5	0.1	
mil	max	59.1	8.66	205	177	252	165	27.55	39.37	27.55	11.81	
	min	39.37	5.91	193	166	236	149	19.68	35.43	19.68	3.93	

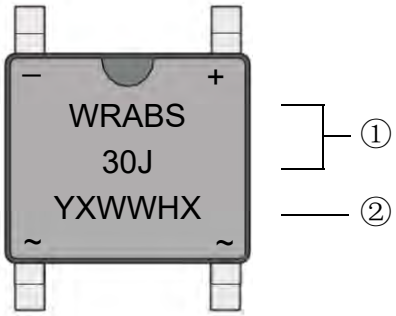
ABS Suggested Pad Layout



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

Dimensions is millimeters

Marking Information



①Product model : WRABS30J

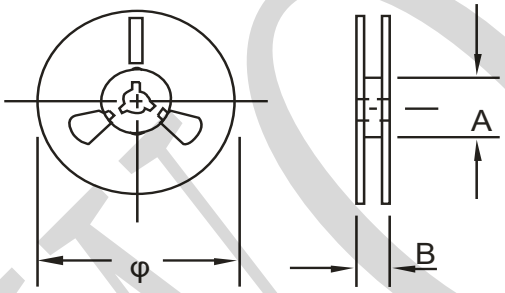
②PDC information：

Y X WW H X

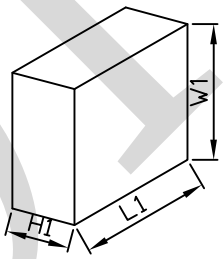
- M:Internal identification code 2
- H:Halogen-free
- WW:Week code(01 to 53)
- X:Internal identification code 1
- Y:Year code(ex:0=2020)

Packaging Information

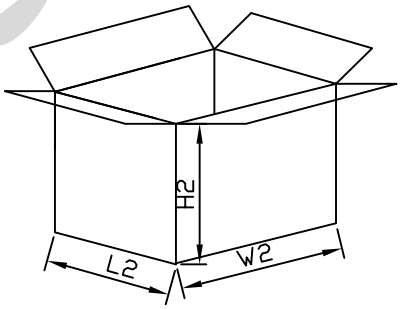
1.Reel Dimensions



2.Inside Box



3.Outside Box



Packaging Information

NO	UNIT	Tube Dimensions			Inside Box			Outside Box		
Size	mm	φ	A	B	L1	W1	H1	L2	W2	H2
		330	100	17	340	340	40	360	360	270
QTY	PCS	Smallest package, 5000PCS/reel			10K PCS,2 reels			60K PCS,6 boxes in total		
Note	Tolerance ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									

Revision Histor			
Date	Revision	Description & changes	Author
2024.04.10	1.0	Initial version	Ren
2026.07.01	1.1	Version updating	Tang

WORLD