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

WRMSB40J/K/M

01-Jul-2026

Ultrasoft Recovery Bridge

VF:0.71V@1A/125°C



MSB Package

PINNING

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

Features

- Reverse Voltage - 1000 V
- Iorward Current - 4.0 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	WRMSB40J	WRMSB40K	WRMSB40M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Maximum RMS voltage	V_{RMS}	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	600	800	1000	V
Average Rectified Output Current	I_o	4.0			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}	150			A
I^2t rating for fusing (1ms< t < 8.3ms)	I^2t	112			A^2S
Maximum Forward Voltage at 2.0 A	V_F	1.1			V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I_R	10 100			μA
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150			°C
Typical thermal resistance (Note 1)	$R_{\theta JC}$	6			°C/W
	$R_{\theta JA}$	12			

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

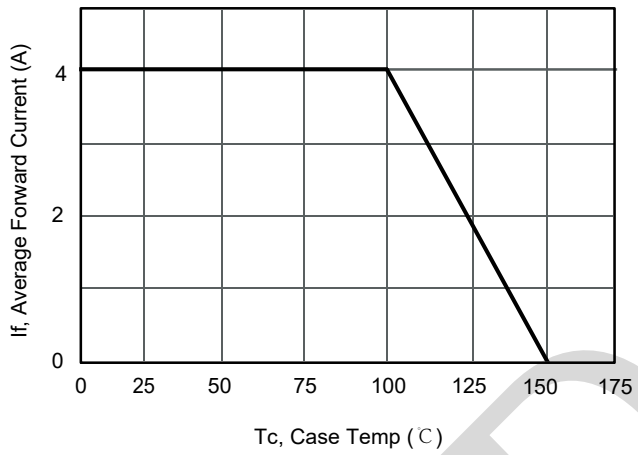


Fig.2 Maximum Non-Repetitive Peak Forward Surage Current

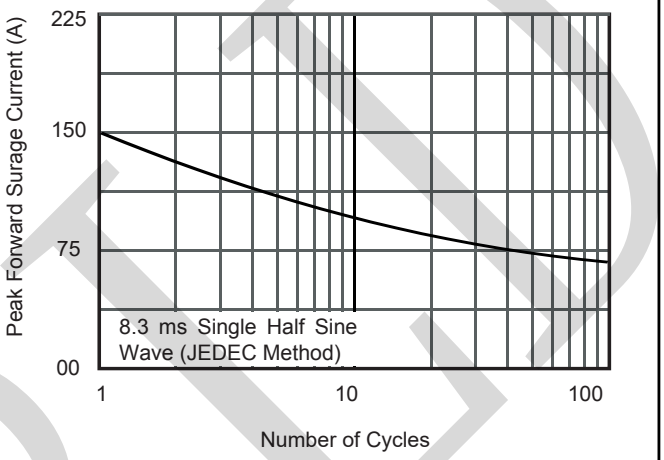


Fig.3 Typical Forward Voltage

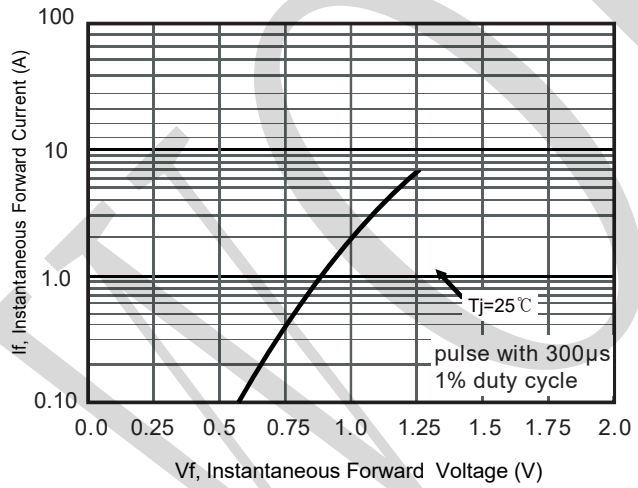
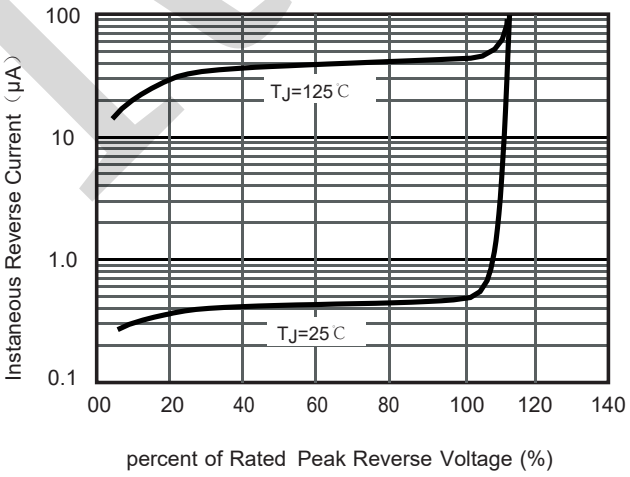
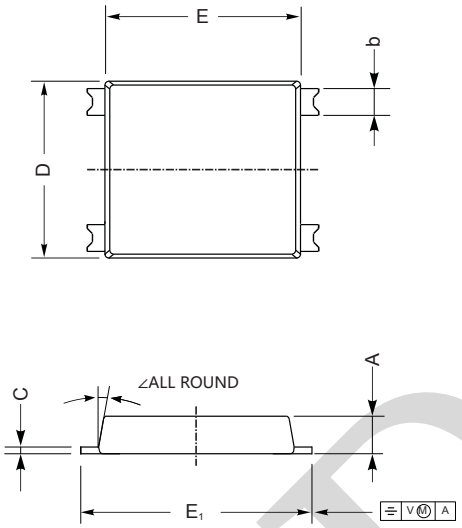


Fig.4 Typical Reverse Characteristics



Package Outline Dimensions

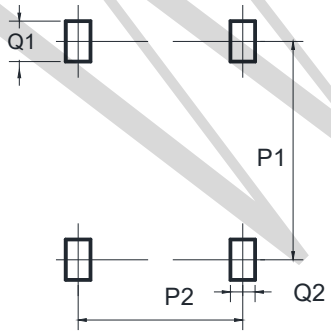
Note:unit In(mm)



MSB mechanical data

UNIT		A	C	D	E	E1	L	e	b	∠
mm	max	1.5	0.29	7.0	7.6	8.9	1.6	5.3	1.15	7°
	min	1.3	0.17	6.2	7.1	8.4	1.0	4.9	0.95	

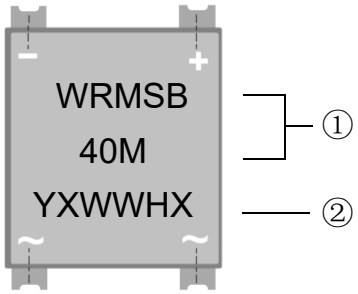
MSB Suggested Pad Layout



UNIT		P1	P2	Q1	Q2
mm	min	8.30	5.10	1.6	1.2

Dimensions is millimeters

Marking Information



①Product model : WRMSB40J or WRMSB40K or WRMSB40M

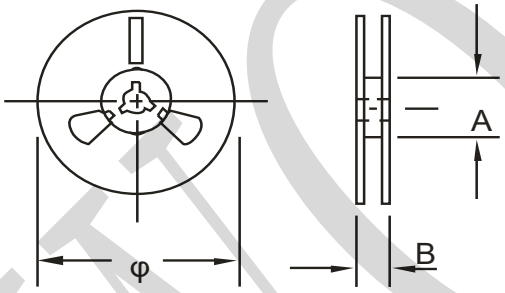
②PDC information：

Y X WW H X

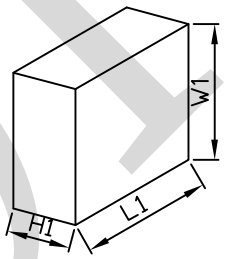
- M:Internal identification code 2
- H:Halogen-free
- WW:Week code(01 to 53)
- X:Internal identification code 1
- Y:Year code(ex:0=2020)

Packaging Information

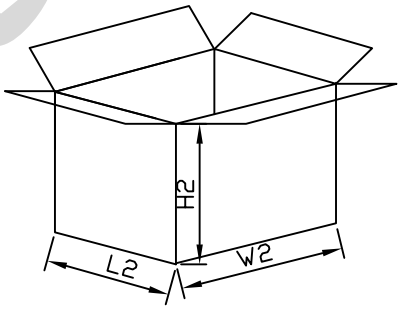
1.Reel Dimensions



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	20	340	340	50	360	360	270
QTY	PCS	Smallest package, 3000PCS/reel			6,000PCS,2 reels			30K PCS,5 boxes in total		
Note	Tolerance ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									

Revision Histor			
Date	Revision	Description & changes	Author
2017.11.08	1.0	Initial version	Sun
2018.11.13	1.1	Add printed characters	Sun
2021.11.23	1.2	Parameter update	Sun
2026.07.01	1.3	Version updating	Tang

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