

MSB20B-MSB20M

Rev.A Oct.-2023

/ Descriptions

2.0A UMSB
2.0A Surface Mount Glass Passivated Bridge Rectifier,UMSB thin package.

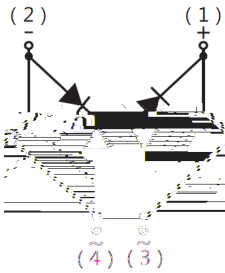
/ Features

100V~1000V 2.0A
Glass Passivated Chip Junction, High Surge Current Capability, Reverse Voltage :100 to 1000V, Forward Current: 2.0A, Designed for Surface Mount Application, HF product.

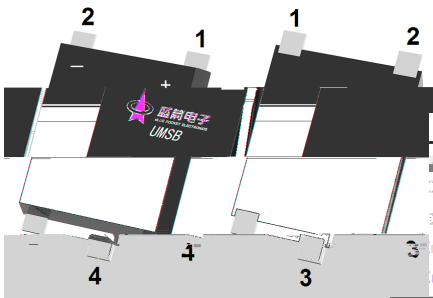
/ Applications

General purpose.

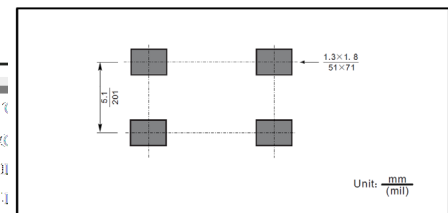
/ Equivalent Circuit



/ Pinning



The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating						Unit
		MSB20B	MSB20D	MSB20G	MSB20J	MSB20K	MSB20M	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current	I_o	2.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50						A
Typical Junction Capacitance <small>Note1</small>	C_i	30						pF
Typical Thermal Resistance <small>Note2</small>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 25						/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150						

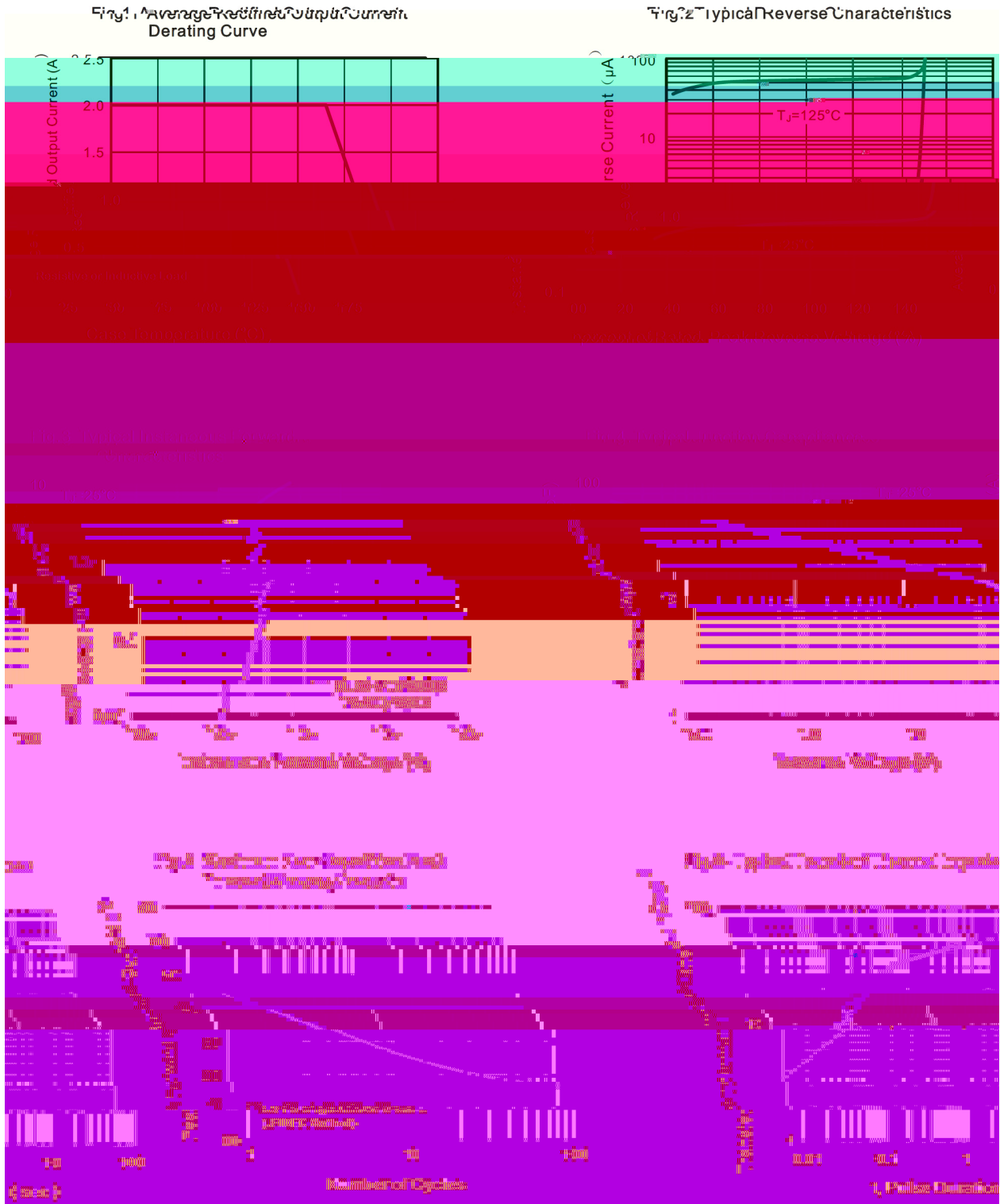
Note:

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.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Forward Voltage	V_F	$I_F=2.0A$	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25$	5	μA
		$T_a=125$	100	

/ Electrical Characteristic Curve



/ Marking Instructions



MB20M

Note:

MB20M Product Type Code

**** Lot No. Code, code change with Lot No

Marking

Type number	Marking code
MSB20B	MB20B
MSB20D	MB20D
MSB20G	MB20G
MSB20J	MB20J
MSB20K	MB20K
MSB20M	MB20M

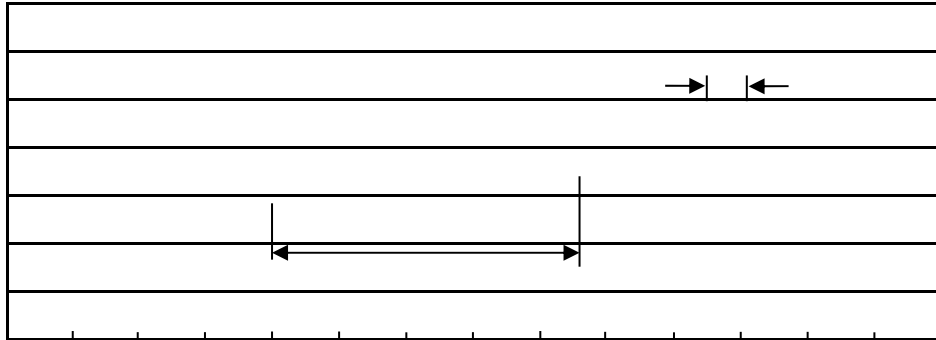
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DATA SHEET

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Note:

- | | | | |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 7~ E	Units ;>û iH					Dimension ;>û p . (unit Åmm³)		
	UniReel / --	ReelInnerBø -- /-	UniInnerBø /-	InnerBøOuterBø - /1ç	UniOuterBø /1ç	Reel	InnerBø -	OuterBø 1ç
UMSB	3,000	2	6,000	6	36,000	13"×16	337×337×49	380×335×366

/ Notices