

1A SURFACE MOUNT SCHOTTKY BRIDGE

RECTIFIER Reverse Voltage - 40 to 200 V

Forward Current - 1A

FEATURES

- ◆High current capability
- ◆Low forward voltage drop
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

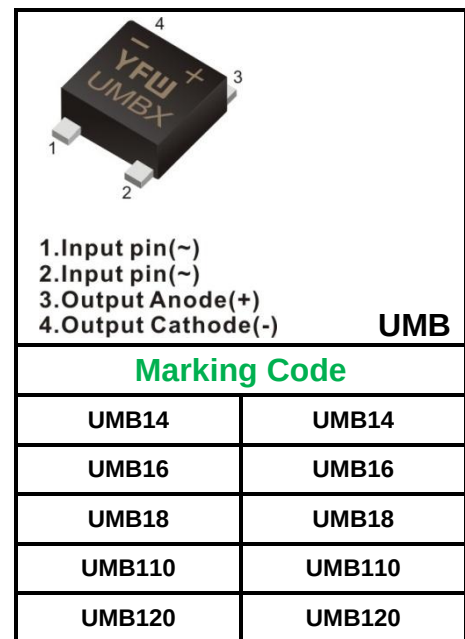
MECHANICAL DATA

- ◆Case: UMB
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 45mg / 0.0016oz

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	UMB14	UMB16	UMB18	UMB110	UMB120	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	60	80	100	200	V
Maximum RMS voltage	V _{RMS}	28	42	56	70	140	V
Maximum DC Blocking Voltage	V _{DC}	40	60	80	100	200	V
Average Rectified Output Current	I _{F(AV)}	1					A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I _{FSM}	40		30			A
Max Instantaneous Forward Voltage at 1 A	V _F	0.55	0.70	0.85	0.90		V
Maximum DC Reverse Current @T _A =25°C at Rated DC Blocking Voltage @T _A =100°C	I _R	0.3 10		0.2 5	0.1 2		μA
Typical Junction Capacitance ^(Note1)	C _j	220	80				pF
Typical Thermal Resistance ^(Note2)	R _{θJA}	100					°C/W
Operating and Storage Temperature Range	T _j	-55 ~ +150					°C
Storage Temperature Range	T _{stg}	-55 ~ +150					°C

(1) Measured at 1 MHz 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 Characteristic Curves

Fig.1 Forward Current Derating Curve

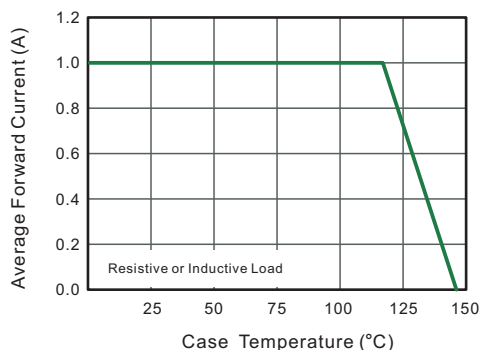


Fig.2 Typical Reverse Characteristics

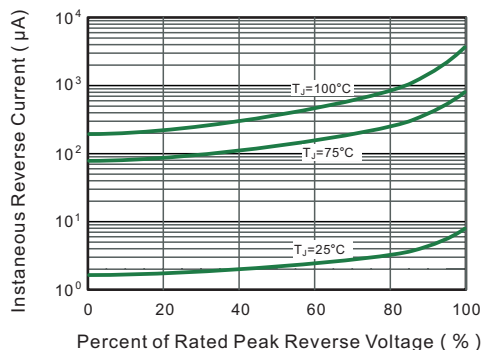


Fig.4 Typical Junction Capacitance

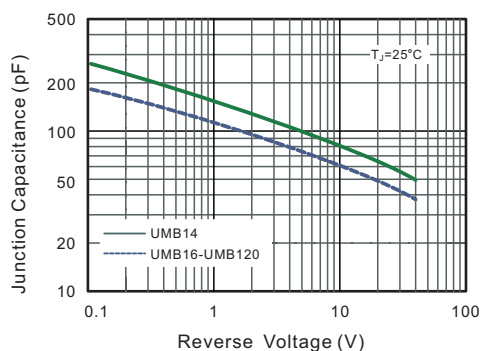


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

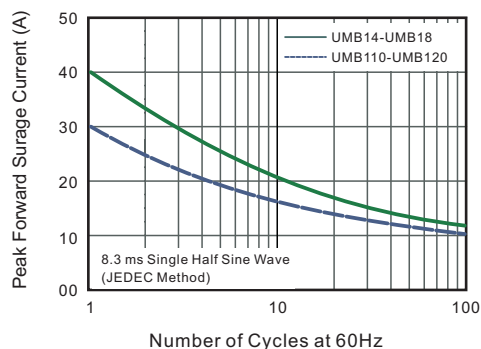
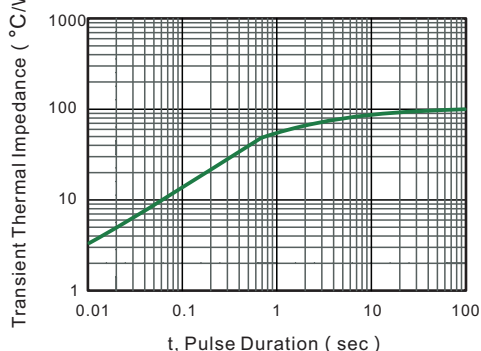
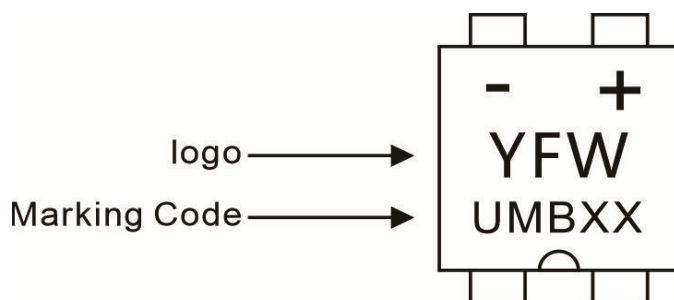


Fig.6- Typical Transient Thermal Impedance



Marking Diagram



Ordering information

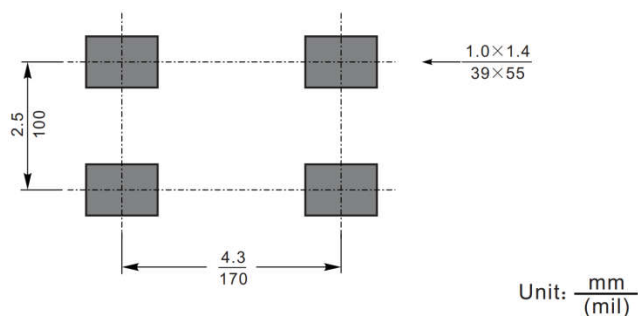
Package	Packing Description	Packing Quantity
UMB	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

UMB

Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	1.0	1.2	39	47
C	0.12	0.20	4.7	7.9
D	3.4	3.8	134	150
E	3.6	4.0	142	157
HE	4.6	5.1	181	201
g	0.51	0.82	20	32
d	2.3	2.7	91	106
e	0.51	0.70	20	28
∠	7°			

The recommended mounting pad size



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