1A SURFACE MOUNT SCHOTTKY BRIDGE

RECTIFIER Reverse Voltage - 40 to 200 V

Forward Current - 1A

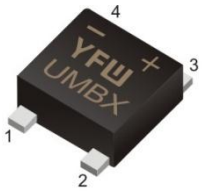
lead-free ROHS

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



1.Input pin(~)
2.Input pin(~)
3.Output Anode(+)
4.Output Cathode(-)

UMB

Marking Code	
UMB14	UMB14
UMB16	UMB16
UMB18	UMB18
UMB110	UMB110
UMB120	UMB120

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)	$R_{\theta JA}$	100					°C/W
Operating and Storage Temperature Range	T_j	-55 ~ +125					°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.

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Fig.1 Forward Current Derating Curve

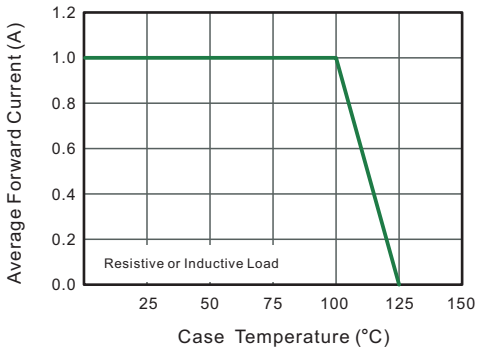


Fig.2 Typical Reverse Characteristics

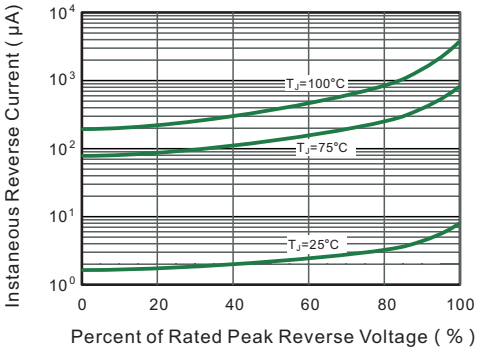
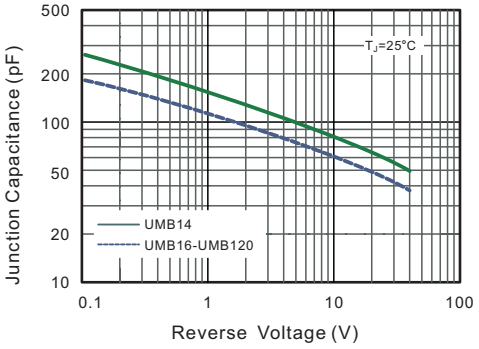


Fig.4 Typical Junction Capacitance



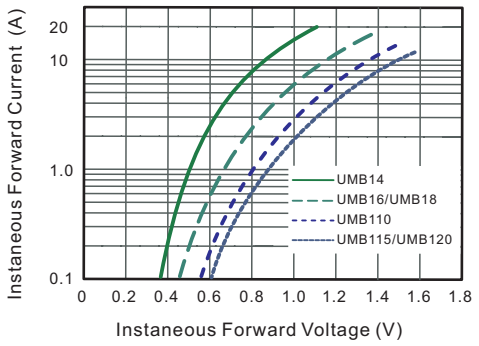


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

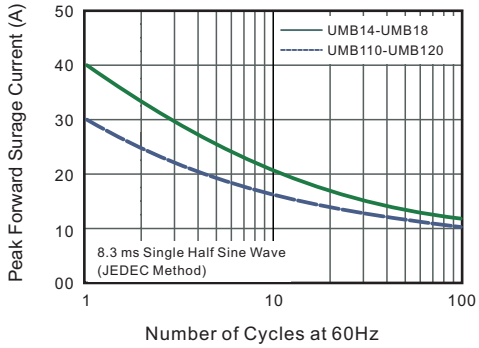
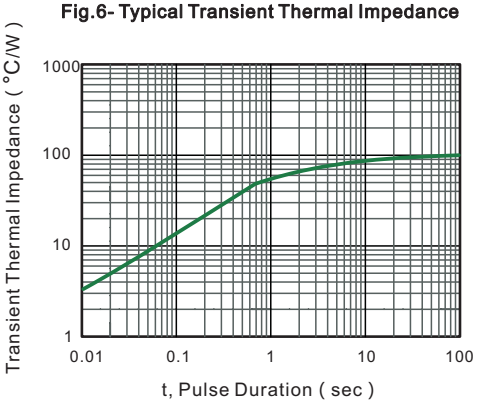


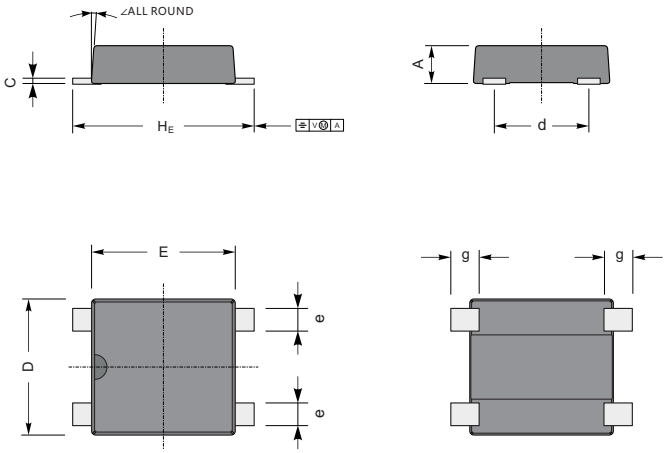
Fig.6- Typical Transient Thermal Impedance



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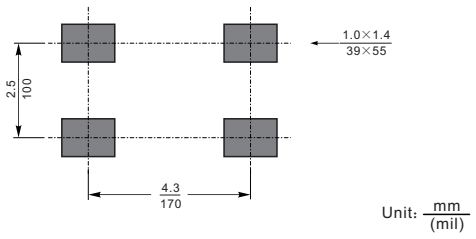
Package Outline UMB

Plastic surface mounted package; 4 leads



UNIT		A	C	D	E	H_E	g	d	e	∠
mm	max	1.2	0.20	3.8	4.0	5.1	0.82	2.7	0.70	7°
	min	1.0	0.12	3.4	3.6	4.6	0.51	2.3	0.51	
mil	max	47	7.9	150	157	201	32	106	28	
	min	39	4.7	134	142	181	20	91	20	

The recommended mounting pad size



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
UMB	Tape/Reel,13"reel	5000	EIA-481-1

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