1A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER Reverse Voltage - 100 to 1000 V

Forward Current – 1A

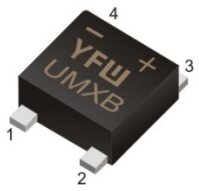
lead-free ROHS

FEATURES

- High current capability
- Low forward voltage drop
- Glass Passivated Chip Junction
- 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	
UM1B	UM1B
UM2B	UM2B
UM4B	UM4B
UM6B	UM6B
UM8B	UM8B
UM10B	UM10B

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	UM1B	UM2B	UM4B	UM6B	UM8B	UM10B	Units
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 at T_c = 125 °C	I_o	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	35						A
Forward Voltage per element @I_F=0.4A @I_F=0.8A	V_F	1.0 1.1						V
Maximum DC Reverse Current @T_A=25°C at Rated DC Blocking Voltage @T_A=125°C	I_R	3 30						μA
Typical Junction Capacitance (Note1)	C_j	13						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	110						°C/W
Operating and Storage Temperature Range	T_j, 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.

Fig.1 Average Rectified Output Current Derating Curve

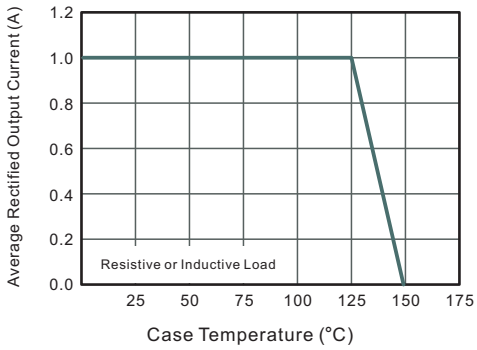


Fig.2 Typical Reverse Characteristics

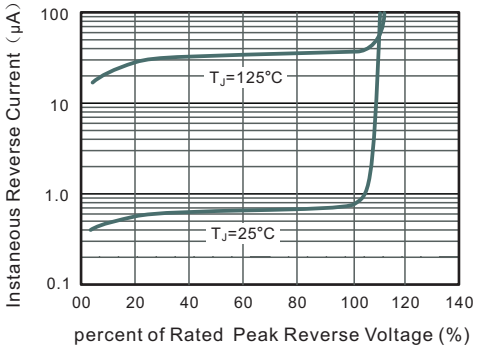


Fig.3 Typical Instaneous Forward Characteristics

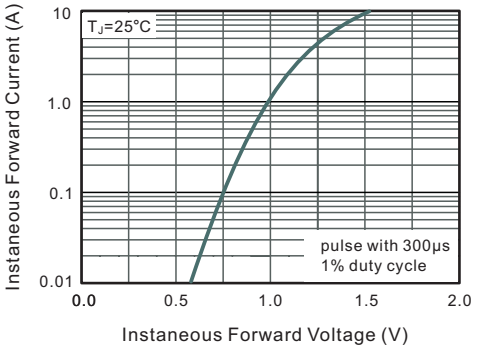


Fig.4 Typical Junction Capacitance

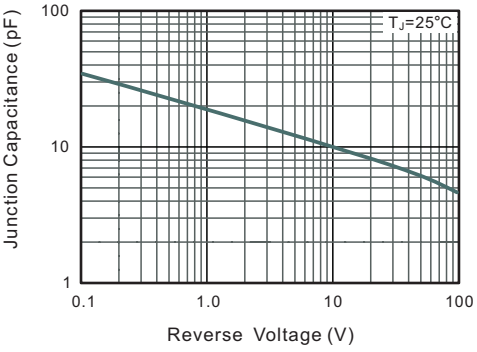
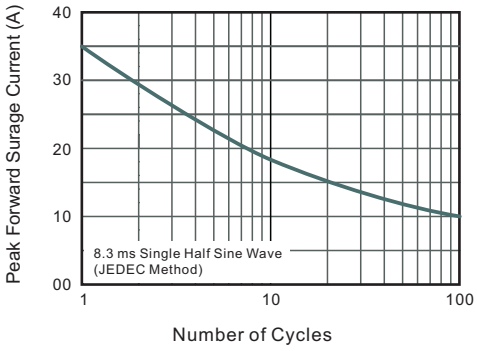
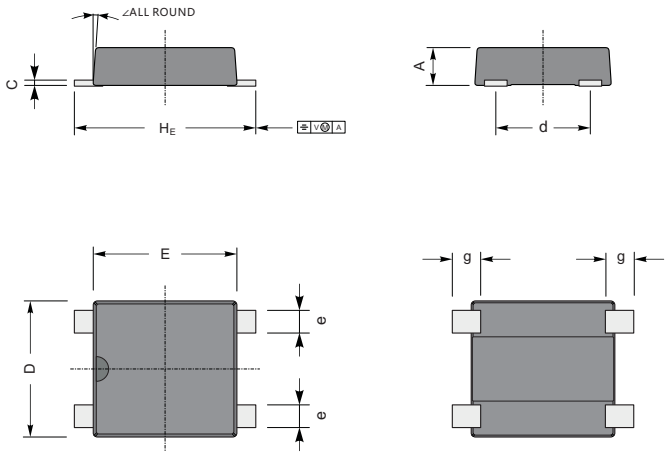


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



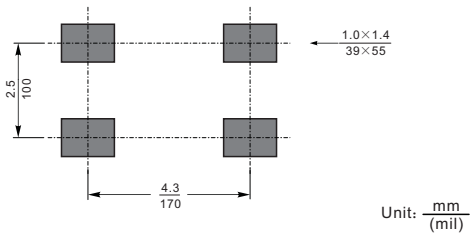
Package Outline UMB

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