



1A SURFACE MOUNT SCHOTTKY BRIDGE

**FEATURES:**

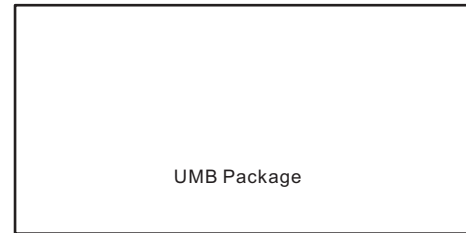
- Reverse Voltage - 40V
- Forward Current - 1.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

**PINNING**

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

**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	UMB14S	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum RMS voltage	$V_{RMS}$	28	V
Maximum DC Blocking Voltage	$V_{DC}$	40	V
Average Rectified Output Current at $T_c = 125\text{ }^\circ\text{C}$	$I_o$	1.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	40	A
Forward Voltage per element      at $I_f = 1\text{ A}$	$V_F$	0.55	V
Maximum DC Reverse Current      @ $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage      @ $T_a = 100\text{ }^\circ\text{C}$	$I_R$	0.3 10	mA
Typical Junction Capacitance ( Note1 )	$C_j$	110	pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$	85	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	-55 ~ +125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150	$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. P.C.B. mounted with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad areas.



Fig.1 Forward Current Derating Curve

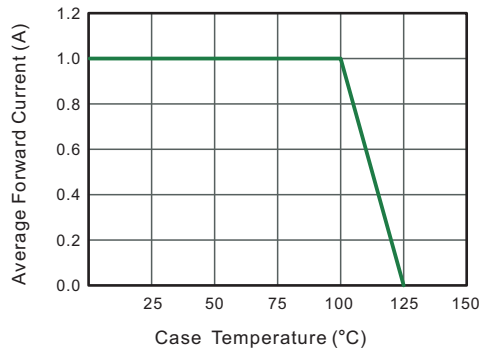


Fig.2 Typical Reverse Characteristics

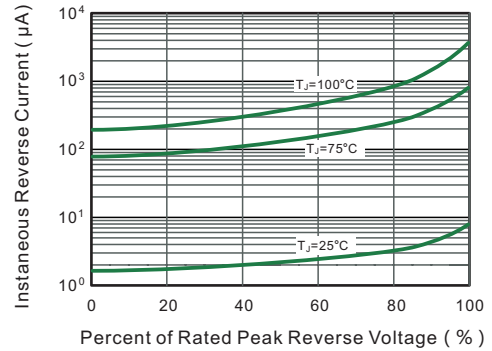


Fig.3 Typical Forward Characteristic

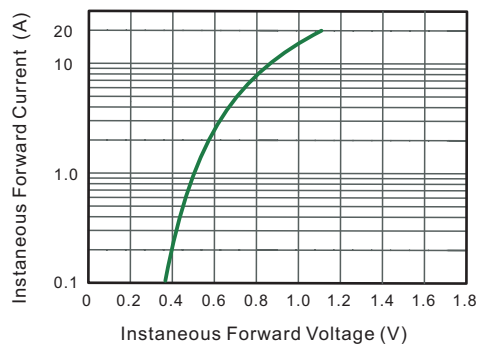


Fig.4 Typical Junction Capacitance

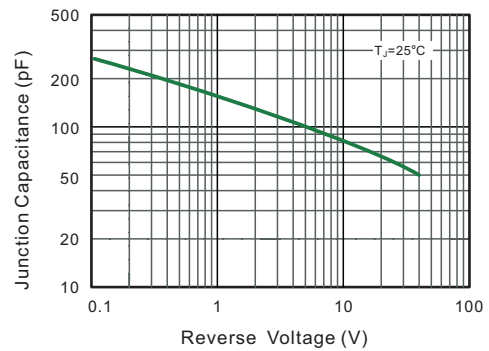


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

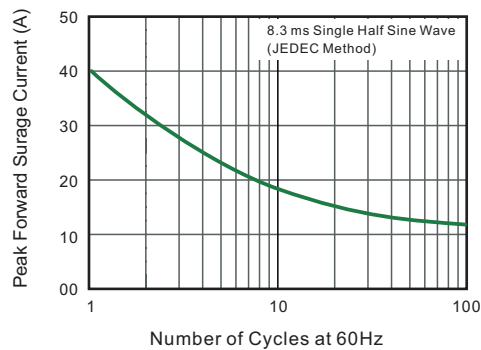
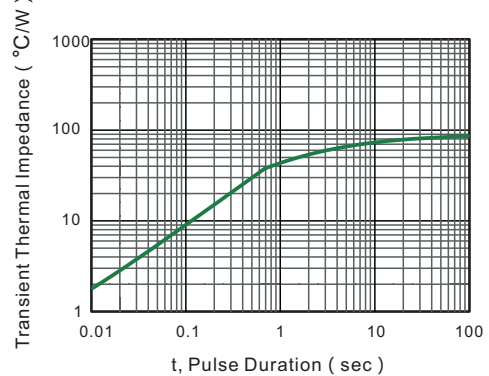


Fig.6- Typical Transient Thermal Impedance

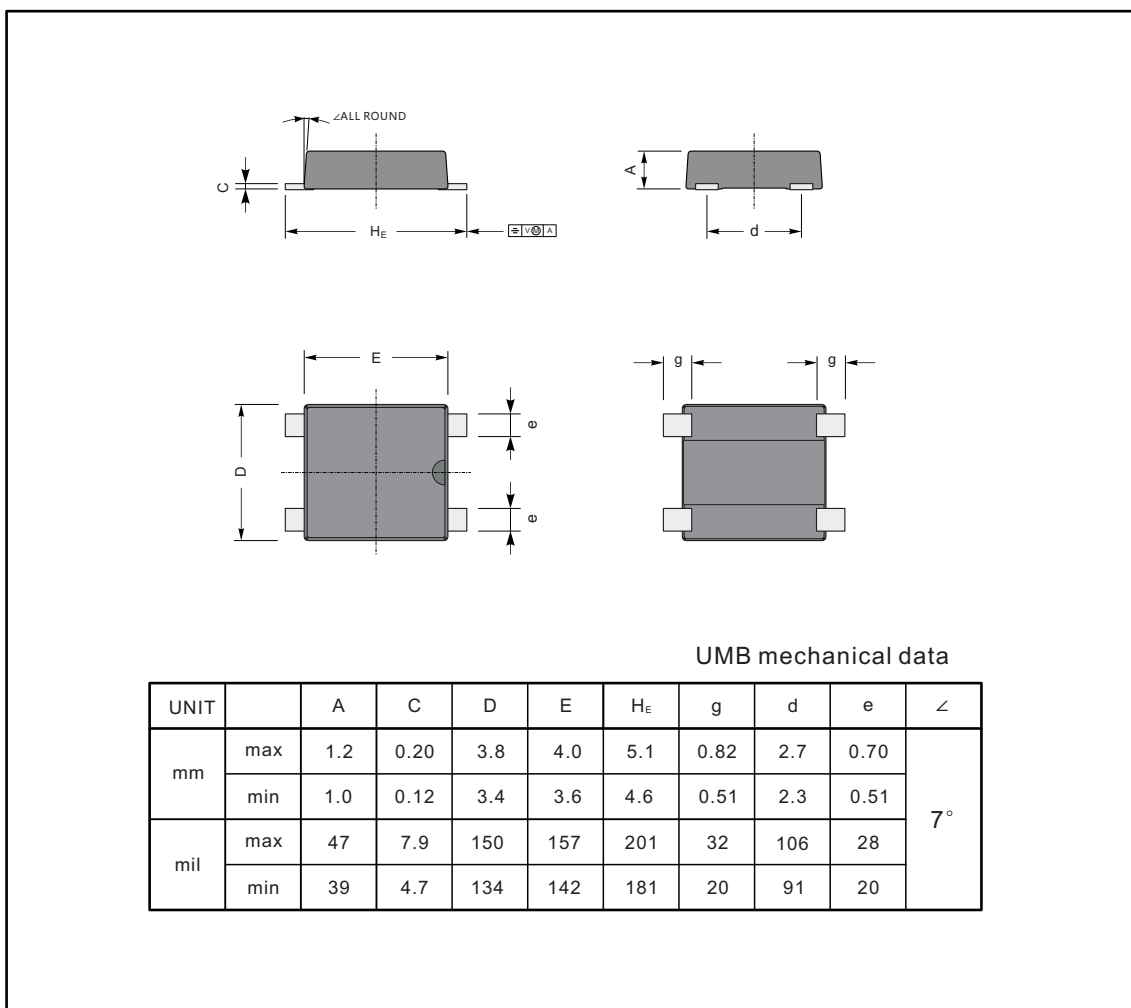




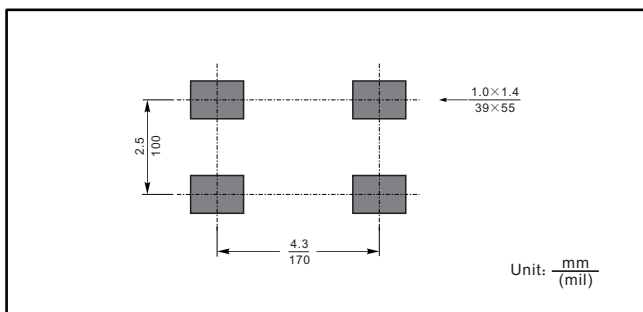
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

UMB



The recommended mounting pad size



Marking

Type number	Marking code
UMB14S	UMB14