

**2A SURFACE MOUNT SCHOTTKY BRIDGE**

**FEATURES:**

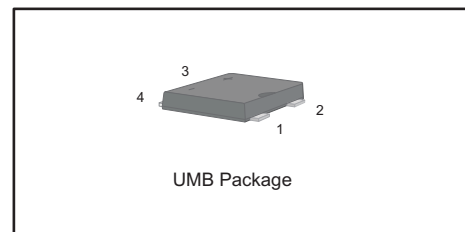
Reverse Voltage - 40 to 200 V  
 Forward Current - 2 A  
 High Surge Current Capability  
 Designed for Surface Mount Application

**MECHANICAL DATA**

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

**PINNING**

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



**Absolute Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	UMB24	UMB26	UMB28	UMB210	UMB220	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
Maximum Average Forward Rectified Current @ Fig.1	$I_{F(AV)}$	2.0					A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50		40			A
Peak Forward Surge Current, 1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	100		80			A
$I^2t$ Rating for fusing (3ms ≤ t ≤ 8.3ms)	$I^2t$	10.3		6.6			A <sup>2</sup> S
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.55	0.70	0.85			V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	$I_R$	0.5 10		0.3 5			mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	93	70	55		35	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	45 15 25				°C/W	
Operating Junction 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) P.C.B. mounted with 4 X 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.



Fig.1 Forward Current Derating Curve

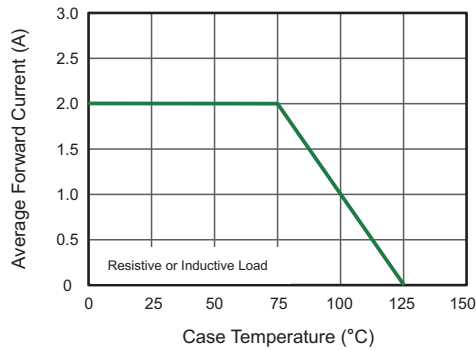


Fig.2 Typical Reverse Characteristics

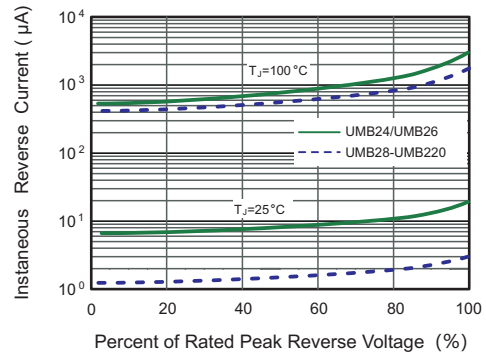


Fig.3 Typical Forward Characteristic

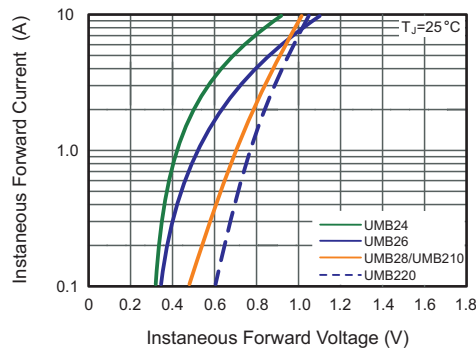


Fig.4 Typical Junction Capacitance

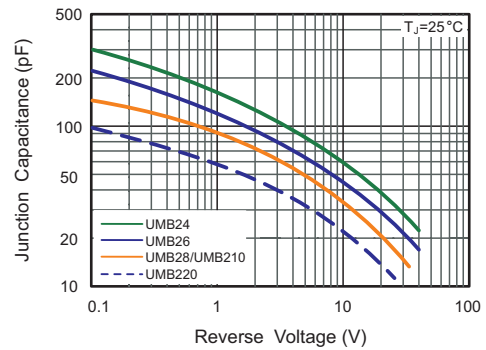
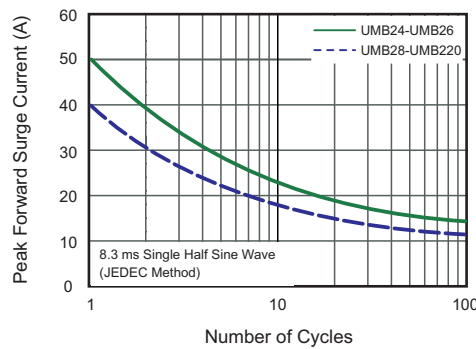


Fig.5 Maximum Non-Replicative Peak Forward Surge Current

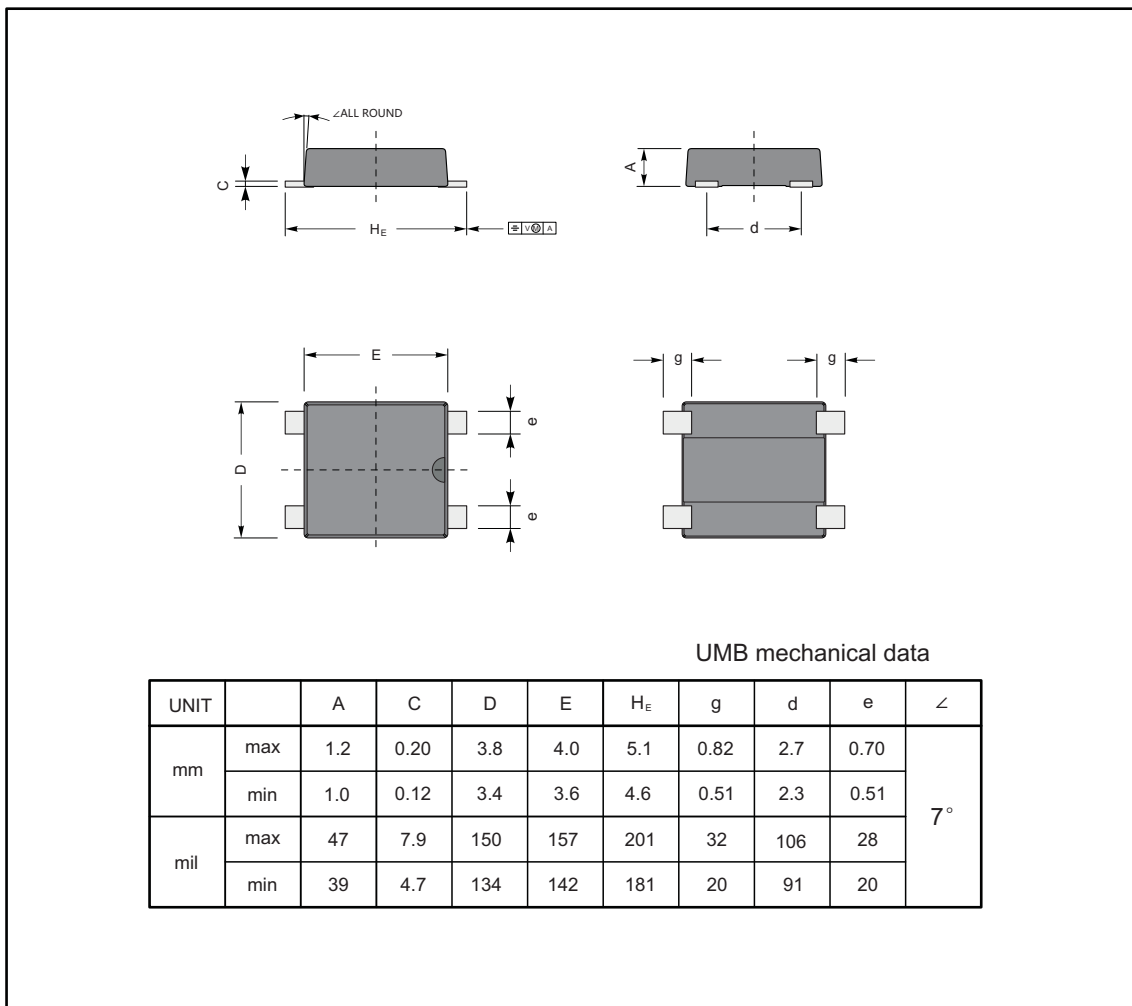




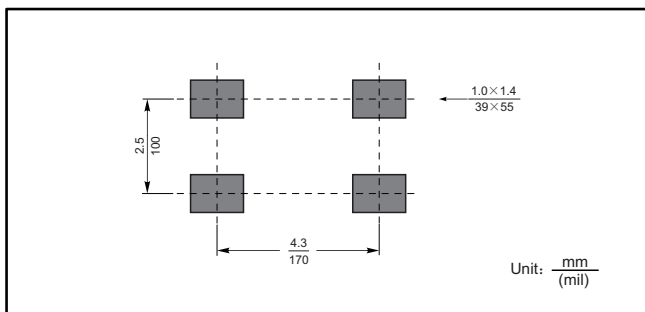
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

UMB



The recommended mounting pad size



Marking

Type number	Marking code
UMB24	MB24
UMB26	MB26
UMB28	MB28
UMB210	MB210
UMB220	MB220



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