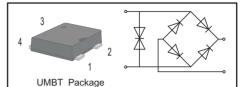
## UMBT-36CUM10B SURGE SUPPRESSOR BRIDGE

#### FEATURES: PINNING

- RoHS compliant
- · Lower clamping voltage
- · Lead Free Finish/RoHS Compliant
- Green Molding Compound (No Halogen and Antimony)
- · Glass Passivated Chip Junction
- · High Surge Current Capability
- Designed for Surface Mount Application

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



#### **MECHANICAL DATA**

· Case: UMBT

Terminals: Solderable per MIL-STD-750, Method 2026
Approx. Weight: 60mg/0.0021oz

#### 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	36CUM10B	Units
Average Rectified Output Current	Io	0.8	А
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30	А
Maximum Forward Voltage at 0.8 A	V <sub>F</sub>	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage (@VR=1000V)	I <sub>R</sub>	5 40	μΑ
Typical Junction Capacitance ( Note1 )	C <sub>j</sub>	13	pF
Typical Thermal Resistance(Note2)	R <sub>θJA</sub> R <sub>θJC</sub>	85 25	°C/W
Operating and Storage Temperature Range	$T_{j},T_{stg}$	-55 ~ +150	°C

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

2. Mounted on glass epoxy PC board with  $4\times1.5"\times1.5"$  (  $3.81\times3.81~cm$  ) copper pad.

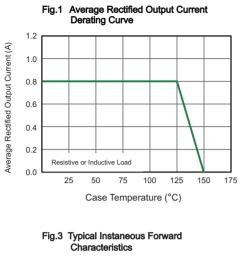
## Maximum Ratings and Thermal Characteristics(TA = 25°C unless otherwise specified)

Parameter of TVS	Symbol	36CUM10B	Unit
Maximum allowable continuous AC voltage at 50-60Hz	$V_{RMS}$	26	V
Breakdown voltage	$V_{BR}$	40~44.2	V
Maximum allowable continuous DC voltage	V <sub>DC</sub>	36	V
Maximum allowable clamping voltage	V <sub>C</sub>	58.1	V
Maximum peak pulsecurrent	I <sub>pp</sub>	6.9	А
Operating and Storage Temperature Range	$T_j$ , $T_{stg}$	-55 ~ +150	°C

#### NOTES:

- 1.The breakdown voltage was measured at 1mA
- 2. The clamping voltage was measured at 10/1000 $\mu$ s standard current
- 3. The peak pulse current was tested at 10/1000µs waveform

Rev 1.1 UMBT-36CUM10B Page 1 of 5



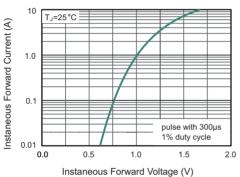


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

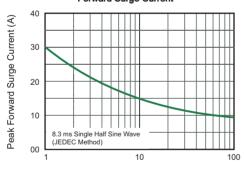


Fig.7 Forward Current Derating Curve

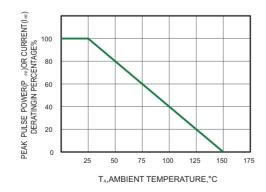


Fig.2 Typical Reverse Characteristics

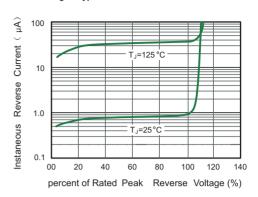


Fig.4 Typical Junction Capacitance

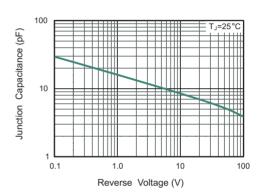


Fig.6 Peak Pulse Power Rating Curve

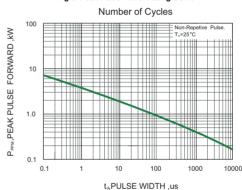
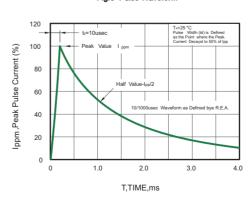


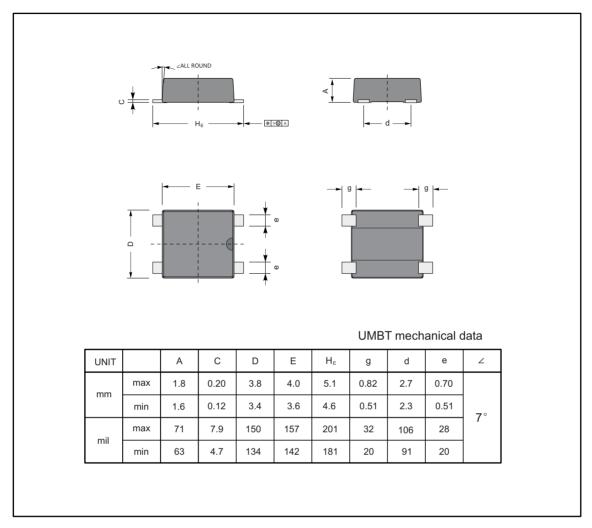
Fig.8 Pulse Waveform



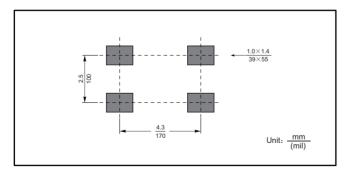
#### PACKAGE OUTLINE

## Plastic surface mounted package; 4 leads

#### **UMBT**



#### The recommended mounting pad size



#### Marking

Type number	Marking code		
36CUM10B	36C10B		

Page 3 of 5 2309184B2+6B0 Rev 1.1

# 文件履历表

序号	制/修订日期	生效日期	版次	修订内容	变更原因	制/修订人	备注
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Rev 1.1 www.sdjingdao.com Page 5 of 5