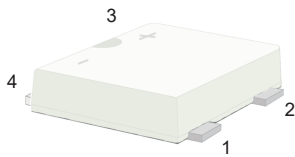


Different Color Bridge Rectifier

UM10B-W

UMB



PINNING

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

Features

- Glass passivated chip
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering: 260 °C /10S at terminals
- Component in accordance to ROHS 2002/95/1 and WEEE 2002/96/EC UMB Package

Mechanical Date

- Case: White molded plastic body
- Molding compound meets UL 94 V-0 flammability rating
- Polarity: Molded on body

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 %.

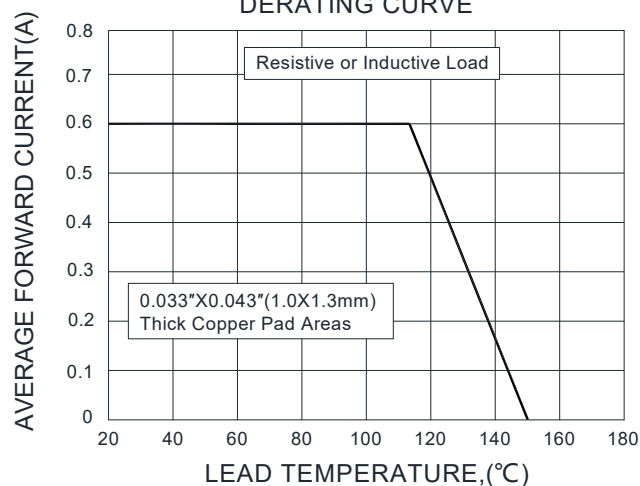
Parameter	Symbols	UM10B-W	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current at $T_c = 115\text{ °C}$	I_O	0.6	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35	A
Forward Voltage per element at $I_F = 0.6A$	V_F	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_a = 25\text{ °C}$ @ $T_a = 125\text{ °C}$	I_R	5 100	μA
Typical Junction Capacitance (Note1)	C_j	30	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	105	°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.

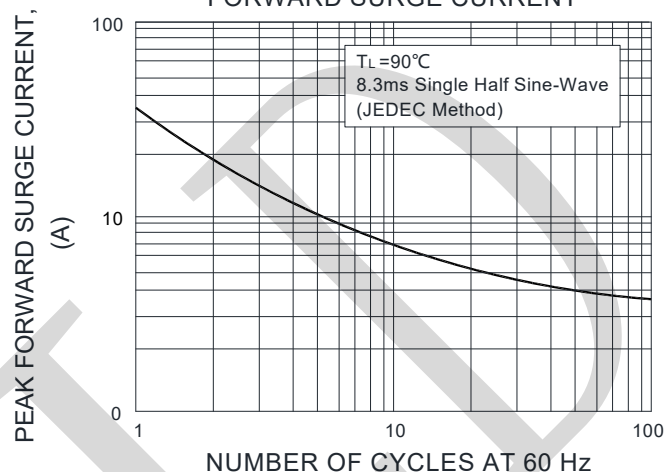
2. P.C.B. mounted with 0.033"×0.043" (1.00mm×1.30mm) copper pad areas.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

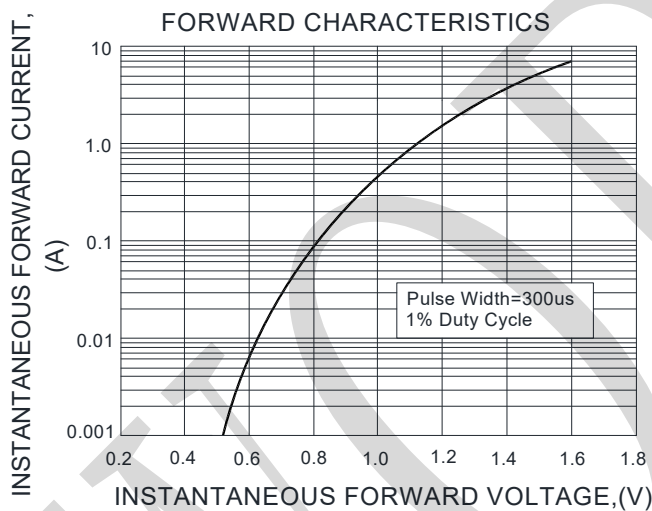
F1G.1-FORWARD CURRENT
DERATING CURVE



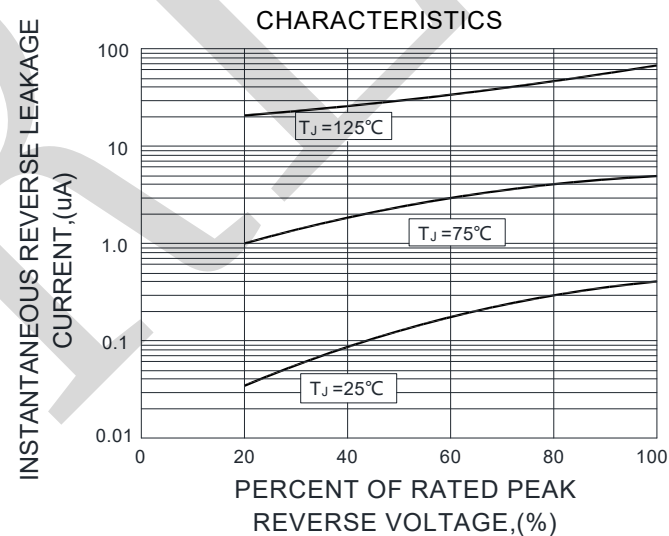
F1G.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT



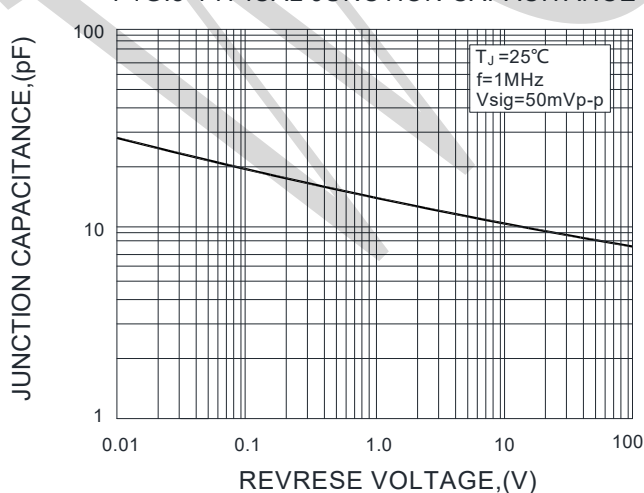
F1G.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS



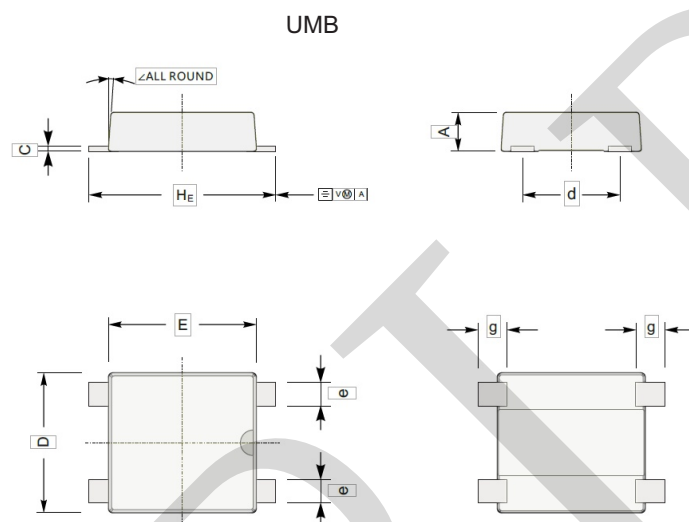
F1G.4-TYPICAL REVERSE
CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



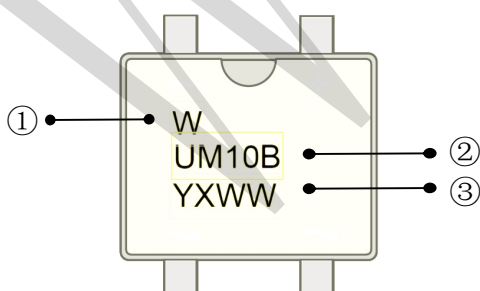
PACKAGE OUTLINE DIMENSIONS



UMB mechanical data

UNIT		A	C	D	E	H_E	g	d	e	$\angle$
mm	max	1.4	0.30	4.05	3.9	5.2	0.95	2.8	0.90	5°
	min	1.0	0.10	3.65	3.5	4.8	0.55	2.4	0.50	
mil	max	55.1	11.8	159	153	204	37	110	35.4	
	min	39.3	3.9	143	137	189	21	94	19.6	

Marking Information



①W : Company's trademark

②Product model : UM10B

③PDC information :

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)