

UMB Plastic-Encapsulate Bridge Rectifier

Features

- Ideal for printed circuit board
- Small size, simple installation
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260/10 seconds at 5lbs., (2.3kg) tension

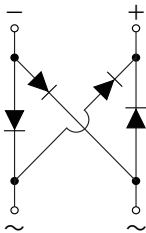
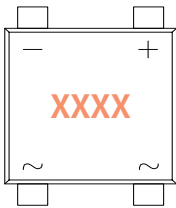
Applications

General purpose 1 phase Bridgerectifier applications

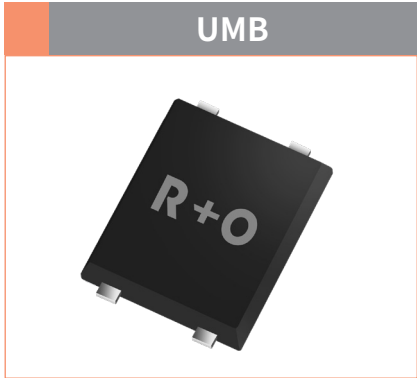
Mechanical Data

- Case: UMB
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Cathode line denotes the cathode end

Function Diagram



Reverse Voltage
200-1000 V
Forward Current
0.8 Ampere



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	UM2B	UM4B	UM6B	UM8B	UM10B
Device marking code			UM2B	UM4B	UM6B	UM8B	UM10B
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	200	400	600	800	1000
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load,TL (Fig.1)	$I_{F(AV)}$	A	0.8				
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	25				
Rating for fusing (t=8.3ms, Ta=25 °C)	I^2t	A ² S	2.6				
Storage temperature	T_{stg}	°C	-55 ~ +150				
Junction temperature	T_j	°C	-55 ~ +150				
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	110				
	$R_{\theta J-L}$	°C /W	30				

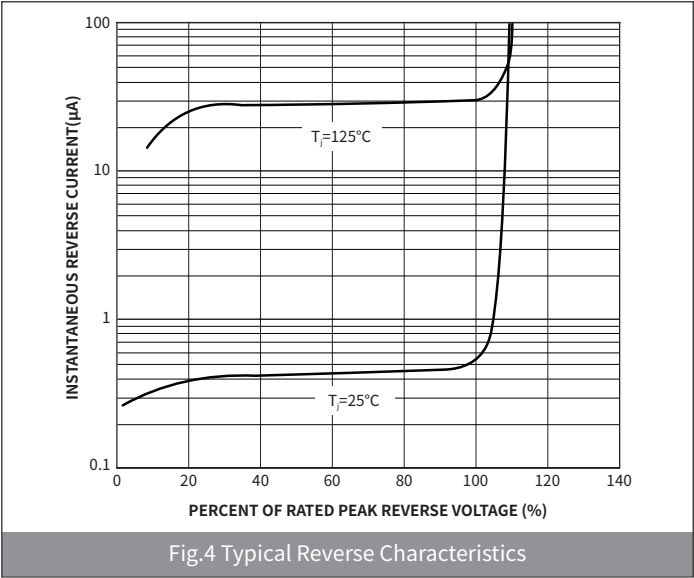
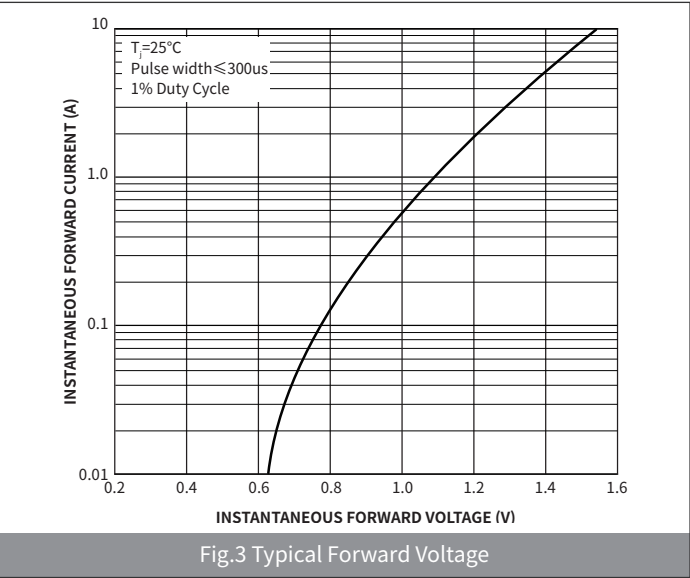
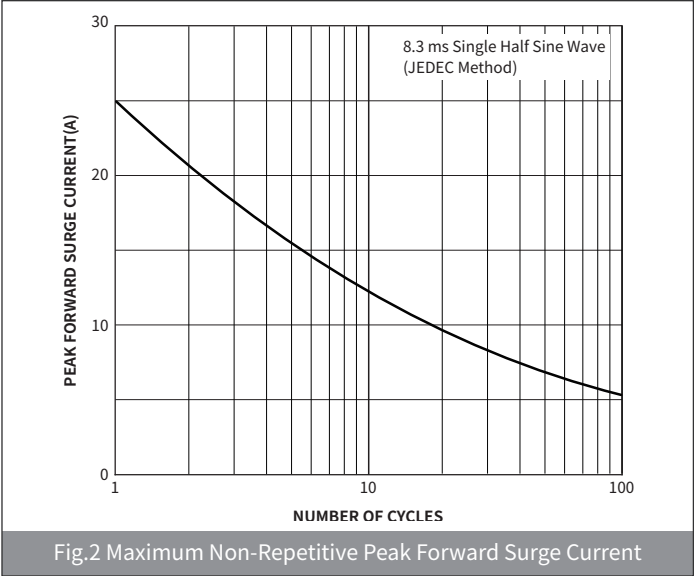
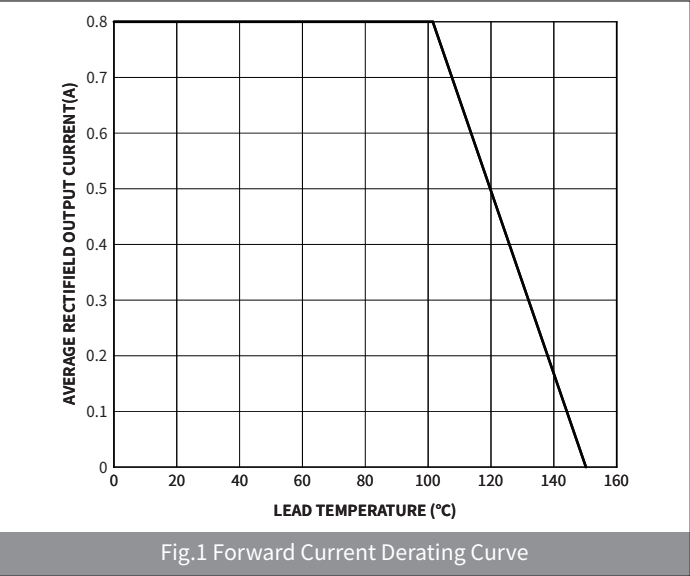
UM2B THRU UM10B

UMB 0.8 AMP Plastic-Encapsulate Bridge Rectifier

Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	UM2B	UM4B	UM6B	UM8B	UM10B
Maximum instantaneous forward voltage	$I_F=0.8A$	V_F	V	1.1				
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_A=25^{\circ}C$	I_{R1}	μA	3				
	$V_R=V_{DC}, T_A=100^{\circ}C$	I_{R2}		30				
Typical junction capacitance	4.0V DC, 1MHz	C_J	pF	13				

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



● Ordering Information

PACKAGE	PACKAGE CODE	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
UMB	R1	5000	10000	80000	11"

● Package Outline Dimensions (UMB)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.6	4.0	0.142	0.157
B	3.6	4.0	0.142	0.157
C	1.0	1.2	0.039	0.047
D	4.6	5.1	0.181	0.201
E	0.5	0.7	0.0197	0.028
F	0.1	0.2	0.0039	0.0079
e	2.3	2.7	0.091	0.106

● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.2	2.8	0.087	0.11
B	1.1	1.7	0.043	0.067
C	0.7	1.3	0.0276	0.0512
E	4.0	4.6	0.157	0.181