

## ULBF Plastic-Encapsulate Bridge Rectifier

### ● Features

- Ideal for printed circuit board
- Low forward voltage drop
- High surge current capability
- Designed for Surface Mount Application

### ● Applications

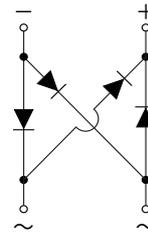
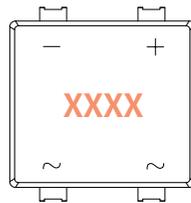
General purpose 1 phase Bridgerectifier applications

### ● Mechanical Data

- Case: ULBF  
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

### ● Function Diagram

**Reverse Voltage**  
800-1000 V  
**Forward Current**  
6 Ampere



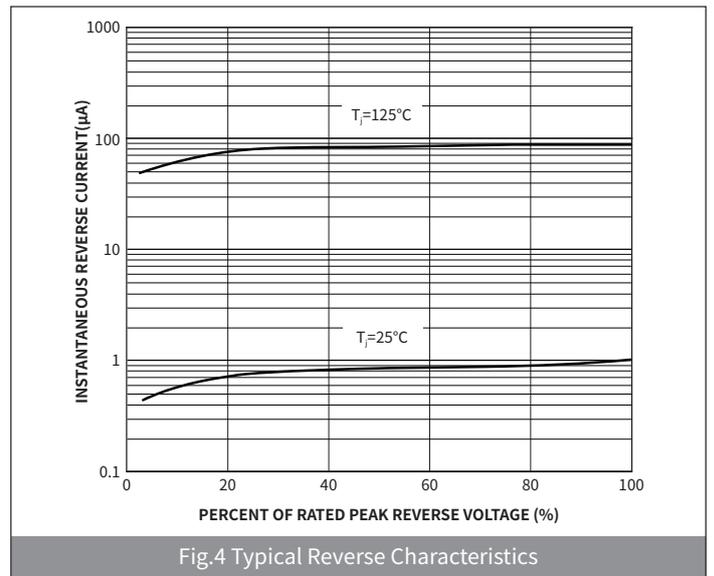
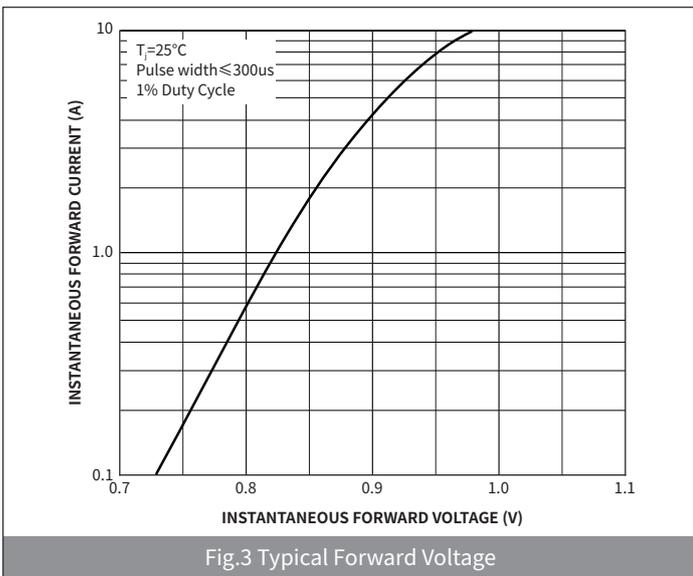
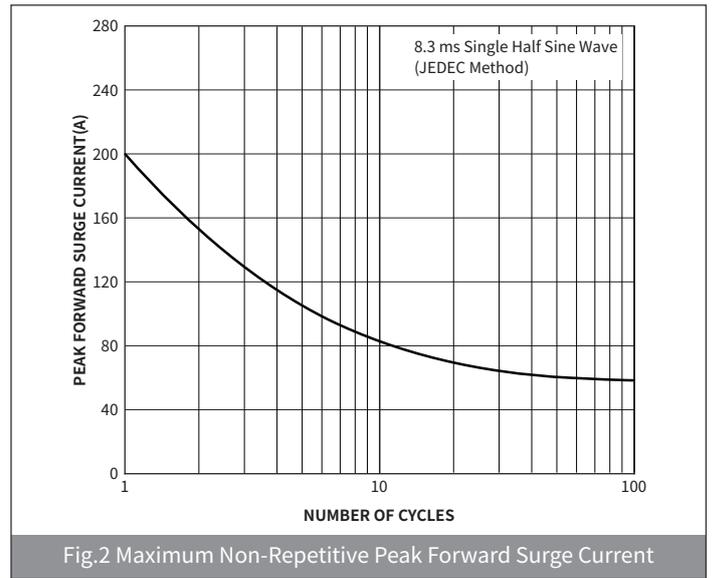
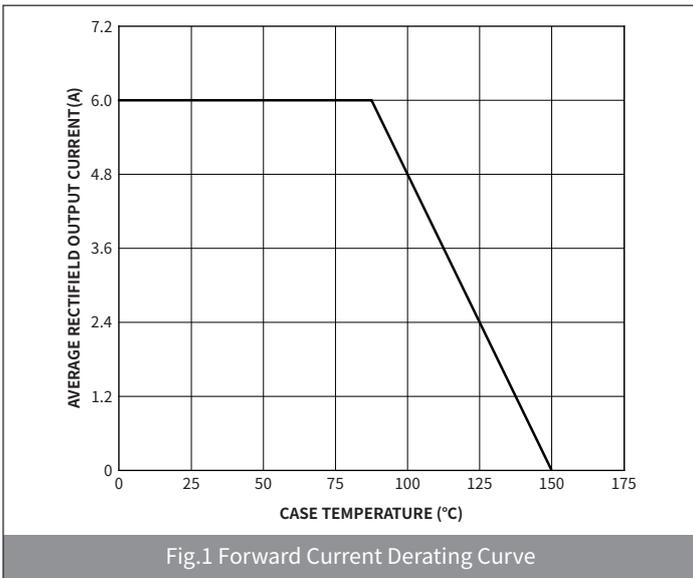
### ● Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ULBF608	ULBF610
Device marking code			ULBF608	ULBF610
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	V	800	1000
Maximum RMS Voltage	$V_{RMS}$	V	560	700
Maximum DC blocking Voltage	$V_{DC}$	V	800	1000
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	6	
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	$I_{FSM}$	A	200	
Rating for fusing (t=8.3ms, Ta=25°C)	$I^2t$	A <sup>2</sup> S	166	
Storage temperature	$T_{stg}$	°C	-55 ~ +150	
Junction temperature	$T_j$	°C	-55 ~ +150	
Typical Thermal Resistance	$R_{\theta J-A}$	°C/W	32	
	$R_{\theta J-L}$	°C/W	12	

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

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	ULBF608	ULBF610
Maximum instantaneous forward voltage	$I_F=6A$	$V_F$	V	1.0	
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_A=25^\circ C$	$I_{R1}$	$\mu A$	5.0	
	$V_R=V_{DC}, T_A=125^\circ C$	$I_{R2}$		100	
Typical junction capacitance	4.0V DC, 1MHz	$C_J$	pF	55	

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



# ULBF608 THRU ULBF610

ULBF 6.0 AMP Plastic-Encapsulate Bridge Rectifier

## ● Ordering Information

PACKAGE	PACKAGE CODE	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
ULBF	R3	3000	6000	30000	13"

## ● Package Outline Dimensions (ULBF)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.35	1.75	0.053	0.069
C	0.25	0.55	0.010	0.022
D	9.40	9.80	0.370	0.386
E	8.40	8.80	0.331	0.346
E <sub>1</sub>	9.80	10.20	0.386	0.402
L	0.85	1.25	0.033	0.049
e	4.90	5.30	0.193	0.209
b	1.25	1.55	0.049	0.061
∠	10°		10°	

## ● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	—	8.70	—	0.343
N	—	5.10	—	0.201
Y	—	2.10	—	0.083
X	—	1.80	—	0.071