

# Zibo Seno Electronic Engineering Co., Ltd.

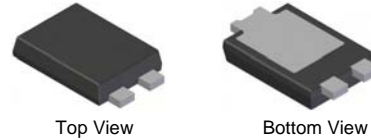


## MUR810 – MUR860

### 8.0A GLASS PASSIVATED SUPERFAST RECTIFIER

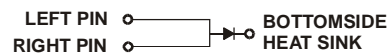
#### Features

- Glass Passivated Die Construction
- Super-Fast Switching
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O



#### Mechanical Data

- Case: TO-277, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.093 grams (approx.)
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**



Note: Pins Left & Right must be electrically connected at the printed circuit board.

#### Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	MUR 810	MUR 820	MUR 830	MUR 840	MUR 850	MUR 860	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	200	300	400	500	600	V
Working Peak Reverse Voltage	$V_{RWM}$							
DC Blocking Voltage	$V_R$							
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	210	280	350	420	V
Average Rectified Output Current @ $T_C = 100^{\circ}\text{C}$	$I_o$	8.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	90						A
Forward Voltage @ $I_f = 8.0\text{A}$	$V_{FM}$	1.0	1.3		1.7			V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	$I_{RM}$	10 400						$\mu\text{A}$
Reverse Recovery Time (Note 1)	$t_{rr}$	35						nS
Typical Junction Capacitance (Note 2)	$C_j$	80				50		pF
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150						$^{\circ}\text{C}$

Note: 1. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$ .  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

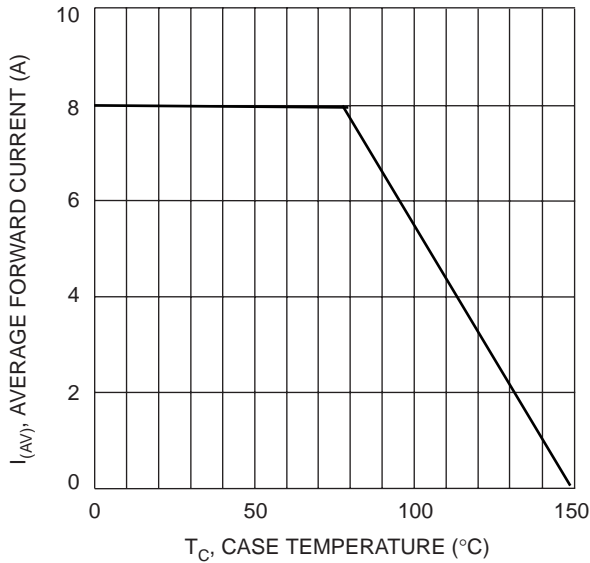


Fig. 1 Forward Current Derating Curve

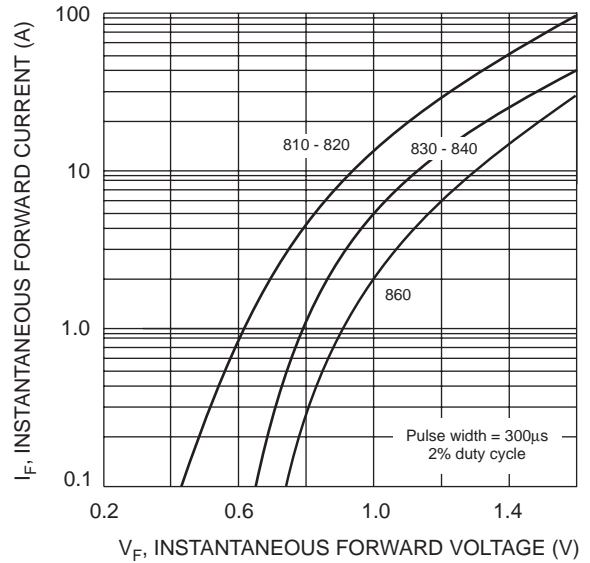


Fig. 2 Typical Forward Characteristics

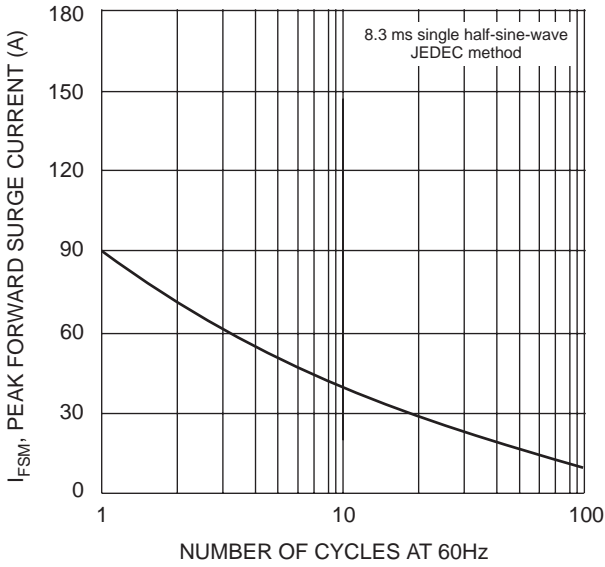


Fig. 3 Max Non-Repetitive Surge Current

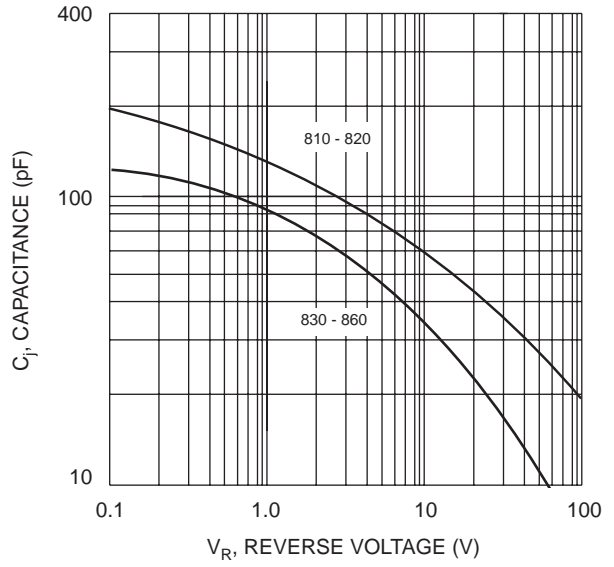
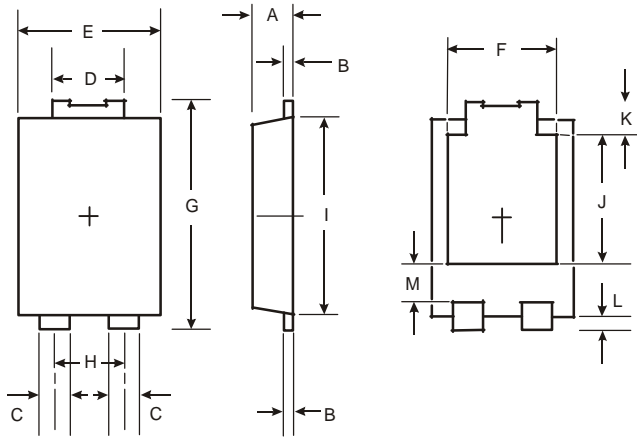


Fig. 4 Typical Junction Capacitance

## Ordering Information

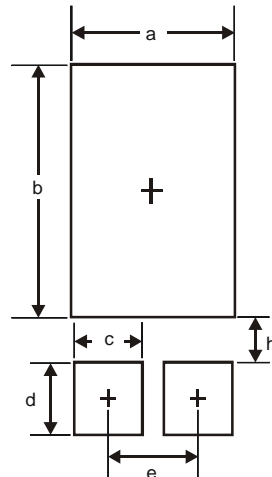
Part Number	Case	Packaging
MUR805-MUR860	TO-277	5000/Tape & Reel

## Outline Dimensions



TO-277		
Dim	Min	Max
A	1.05	1.15
B	0.33	0.43
C	0.80	0.99
D	1.70	1.88
E	3.90	4.05
F	3.054 Typ	
G	6.40	6.60
H	1.84 Typ	
I	5.30	5.45
J	3.549 Typ	
K	0.75	0.95
L	0.50	0.65
M	1.10	1.41
<b>All Dimensions in mm</b>		

## Suggested Pad Layout



Dimensions	Value (in mm)
a	3.360
b	4.860
c	1.390
d	1.400
e	1.840
h	0.852