

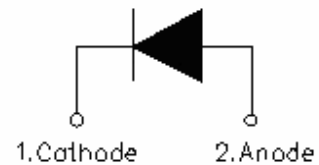
## MUR860 ULTRAFAST PLASTIC RECTIFIER

### Applications:

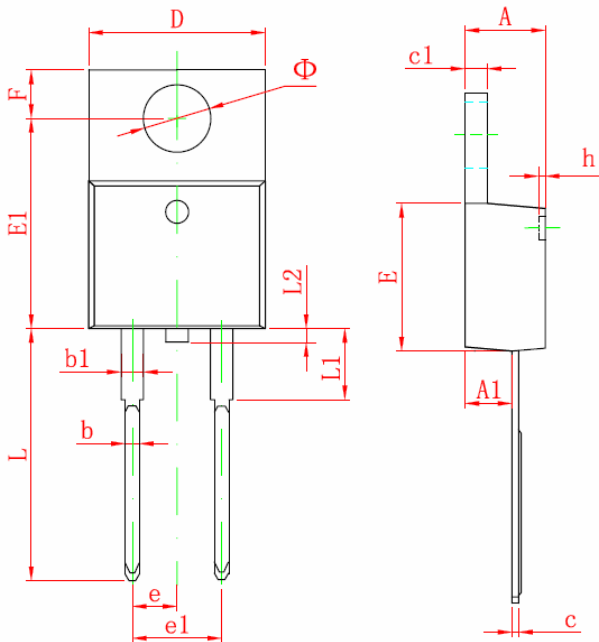
- Switching Power Supply
- Power Switching Circuits
- General Purpose

### Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



### Mechanical Dimensions: In mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	4.470	4.670
A1	2.520	2.820
b	0.710	0.910
b1	1.170	1.370
c	0.310	0.530
c1	1.170	1.370
D	10.010	10.310
E	8.500	8.900
E1	12.060	12.460
e	2.540 TYP	
e1	4.980	5.180
F	2.590	2.890
h	0.000	0.300
L	13.400	13.800
L1	3.560	3.960
L2		1.000
Φ	3.735	3.935

### TO-220AC

**Marking Diagram:**



Where XXXXX is YYWWL

MUR = Device Type  
8 = Forward Current (8A)  
60 = Reverse Voltage (600V)  
SSG = SSG  
YY = Year  
WW = Week  
L = Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**Ordering Information:**

Device	Package	Shipping
MUR860	TO-220AC (Pb-Free)	50pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

**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	MURF860	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	600	V
Average Rectified Output Current @ $T_A = 100^{\circ}\text{C}$	$I_o$	8	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	110	A
Forward Voltage (per element) @ $I_F = 8.0\text{A}$ , $T_J=25^{\circ}\text{C}$	$V_{FM1}$	2.2	V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^{\circ}\text{C}$	$I_R$	5.0 50	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	50	ns
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	25	K/W
Operating and Storage Temperature Range	$T_J$ , $T_{STG}$	-55 to +150	$^{\circ}\text{C}$
Approximate Weight	wt	1.6	g
Case Style	TO-220AC		

Note: 1. Measured with  $I_F=0.5\text{A}$ ;  $I_R=1.0\text{A}$ ;  $I_{RR}=0.25\text{A}$ .  
 2. Mount on Cu-Pad Size 16mm×16mm on P.C.B.

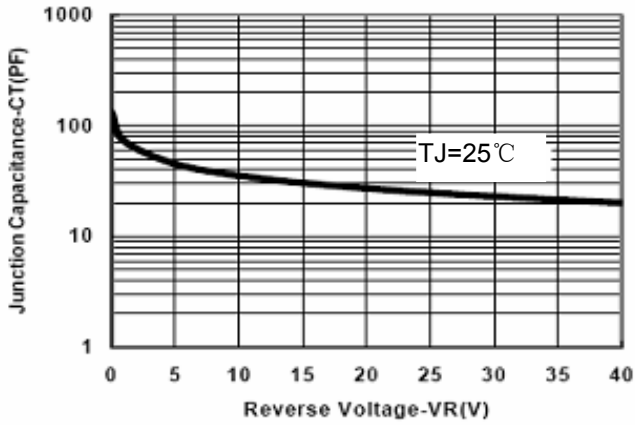


Fig.1-Typical Junction Capacitance

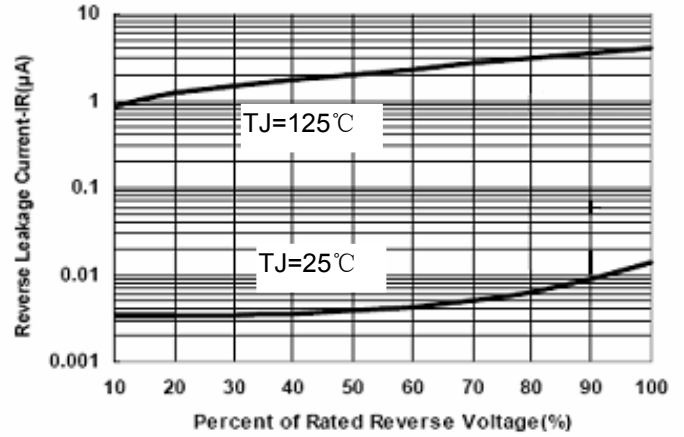


Fig.2-Typical Reverse Characteristics

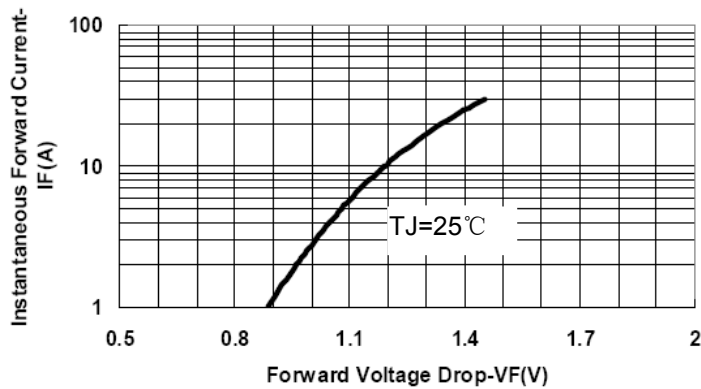


Fig.3-Typical Forward Voltage Drop Characteristics

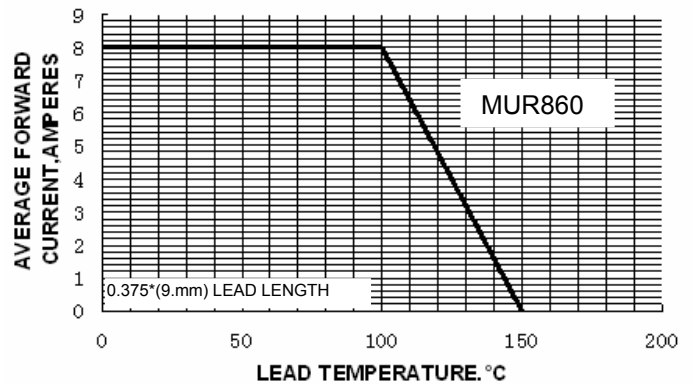


Fig.4-Forward Current Derating Curve

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