Technical Data
Data Sheet N0344, Rev. A

Green Products

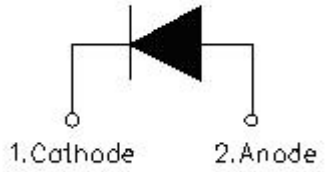
MURF860 ULTRAFAST RECTIFIER

Applications:

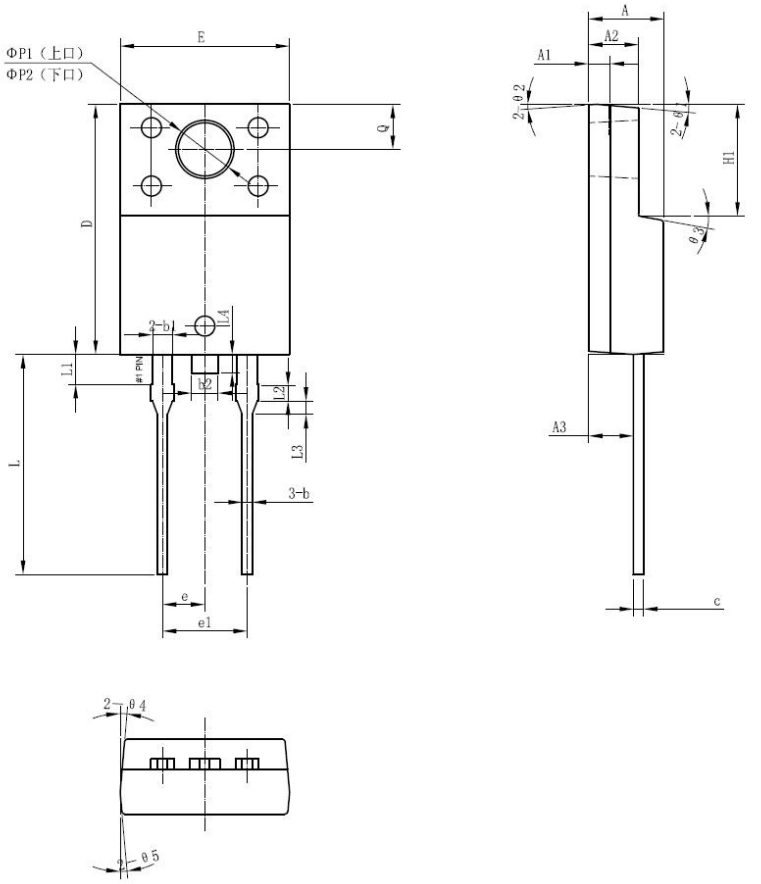
- **Switching Power Supply**
- **Power Switching Circuits**
- **General Purpose**

Features:

- **Ultra-Fast Switching**
- **High Current Capability**
- **Low Reverse Leakage Current**
- **High Surge Current Capability**
- **Plastic Material has UL Flammability Classification 94V-O**
- **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	MIN.	TYP.	MAX.
A	4.30	4.50	4.70
A1	1.10	1.30	1.50
A2	2.80	3.00	3.20
A3	2.50	2.70	2.90
b	0.50	0.60	0.75
b1	1.10	1.20	1.35
b2	1.50	1.60	1.75
c	0.55	0.60	0.75
D	14.80	15.00	15.20
E	9.96	10.16	10.36
e	-	2.55	-
e1	-	5.10	-
H1	6.50	6.70	6.90
L	12.70	13.20	13.70
L1	1.60	1.80	2.00
L2	0.80	1.00	1.20
L3	0.60	0.80	1.00
L4	-	1.10	1.50
ΦP1(上口)	3.30	3.50	3.70
ΦP2(下口)	2.99	3.19	3.39
Q	2.50	2.70	2.90
Θ1		5°	
Θ2		4°	
Θ3		10°	
Θ4		5°	
Θ5		5°	

ITO-220AC(HD)

MURF860

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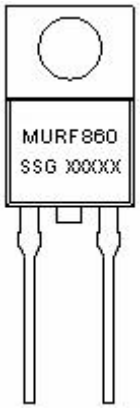
Marking Diagram:



Where XXXXX is YYWWL

MUR	= Device Type
F	= Package 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
MURF860	ITO-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.

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Maximum Ratings and Electrical Characteristics @T_A=25°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
RMS Reverse Voltage	$V_{R(RMS)}$	420	V
Average Rectified Output Current @T_A = 55°C	Io	8.0	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 = 8.0A, T_J=25°C	V_{FM1}	2.2	V
@I_F = 8.0A, T_J=100°C	V_{FM2}	2.0	V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	5 50	μA
Maximum Reverse Recovery Time (Note 1)	Trr	50	ns
Max. Voltage Rate of Change	dv/dt	10,000	V/μs
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	25	K/W
Storage Temperature Range	T_{STG}, T_J	-55 to +150	°C
Approximate Weight	wt	1.6	g
Case Style	ITO-220AC		

Note: 1. Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A
2. Mount on Cu-Pad Size 16mm×16mm on P.C.B.

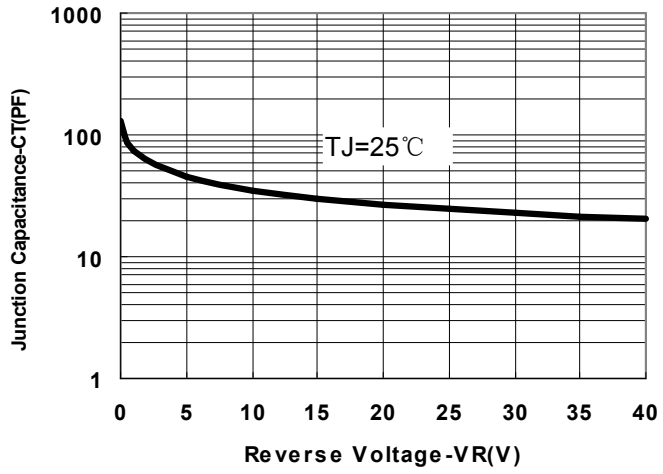

Fig.1-Typical Junction Capacitance

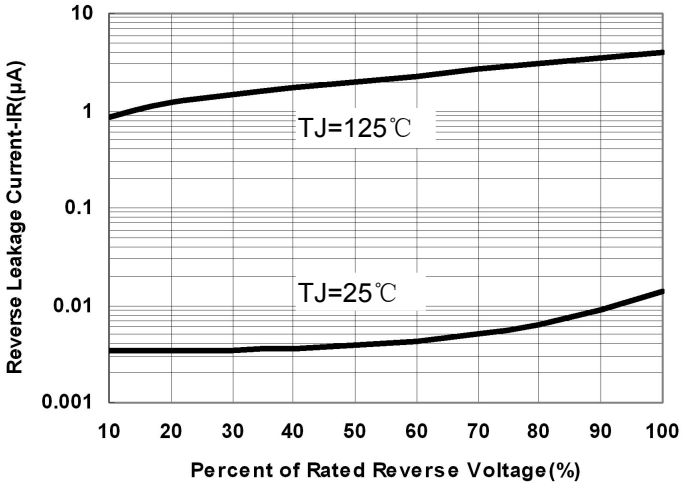

Fig.2-Typical Reverse Characteristics

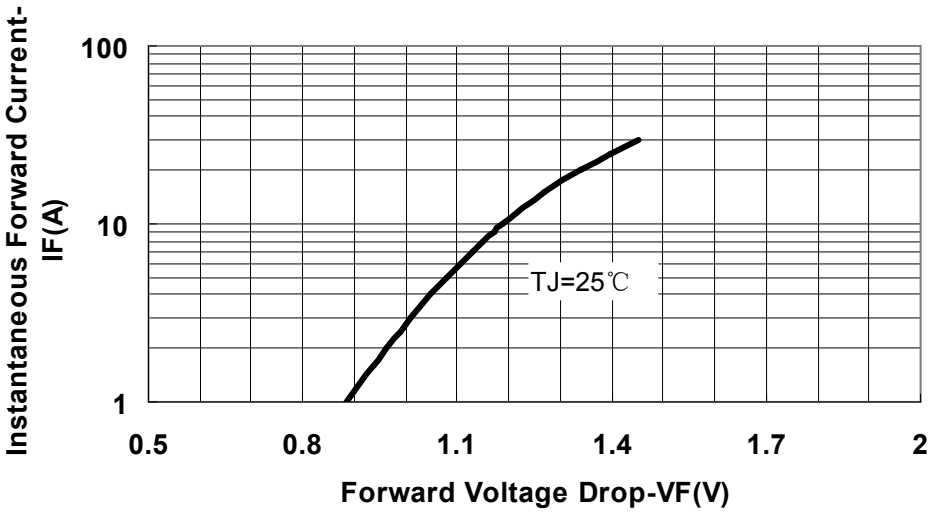

Fig.3-Typical Forward Voltage Drop Characteristics

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