

**Green Products** 

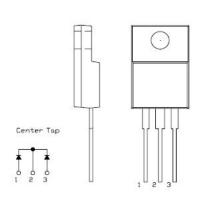
# **MURF1060CT ULTRAFAST RECTIFIER**

# **Applications:**

- Switching Power Supply
- Power Switching Circuits
- General Purpose

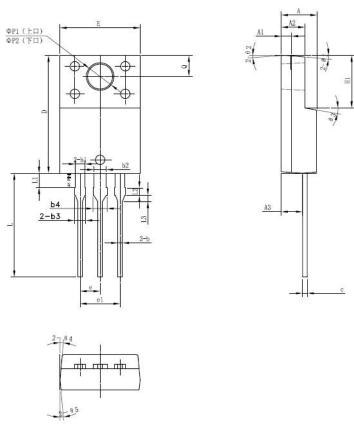
#### Features:

- 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



**OUTLINE DRAWING** 

# **Mechanical Dimensions: In mm**



SYMBOL	MIN.	TYP.	MAX.	
Α	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	
b3	1.20	1.30	1.45	
b4	1.60	1.70	1.85	
	0.55	0.60	0.75	
D E	14.80	15.00	15.20	
E	9.96	10.16	10.36	
е		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	
L1 L2 L3	0.60	0.80	1.00	
ΦP1(上口)	3.30	3.50	3.70	
<b>ΦP2</b> (下口)	2.99	3.19	3.39	
Q	2.50	2.70	2.90	
Θ1		5°		
Θ2		4°		
Θ3		l 10°		
Θ4		5°		
Θ5		5°		

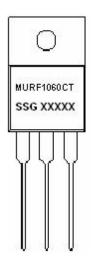
### **ITO-220AB**

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  - http://www.smc-diodes.com sales@ smc-diodes.com •



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# **Marking Diagram:**



Where XXXXX is YYWWL

MUR = Device Type F = Package type

10 = Forward Current (10A) 60 = Reverse Voltage (600V)

CT = Configuration

SSG = SSG YY = Year WW = Week L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

# **Ordering Information:**

Device	Package	Shipping	
MURF1060CT	ITO-220AB	50pcs / tube	
	(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:**

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	-	600	<b>V</b>
Average Forward Current (Per device)	I <sub>F(AV)</sub>	50% duty cycle @Tc=100°C, rectangular wave form	10	А
Peak One Cycle Non-Repetitive Surge Current (Per leg)	I <sub>FSM</sub>	8.3ms, Half Sine pulse	125	Α

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### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop	V <sub>F1</sub>	@ 5A, Pulse, T <sub>J</sub> = 25°C	1.7	V
(Per leg)*	$V_{F2}$	@ 5A, Pulse, T <sub>J</sub> = 100°C	1.5	V
Reverse Current(Per leg)*	I <sub>R1</sub>	@V <sub>R</sub> = rated V <sub>R</sub>	5	μA
		T <sub>J</sub> = 25°C		
	I <sub>R2</sub>	$@V_R = 0.8 V_R$	50	μA
		T <sub>J</sub> = 100°C		
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =500mA, I <sub>R</sub> =1A,and I <sub>rm</sub> =250mA	50	ns
(Per leg)				

<sup>\*</sup> Pulse width < 300  $\mu$ s, duty cycle < 2%

# **Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to +150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	R <sub>θ</sub> JC	DC operation	4	°C/W
Approximate Weight	Wt	-	2	g
Case Style		ITO-220AB		



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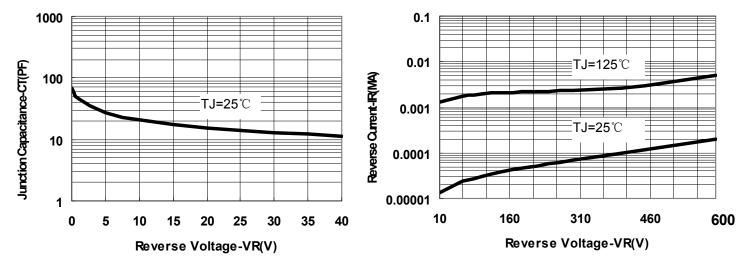


Fig.1-Typical Junction Capacitance

Fig.2-Typical Reverse Characteristics

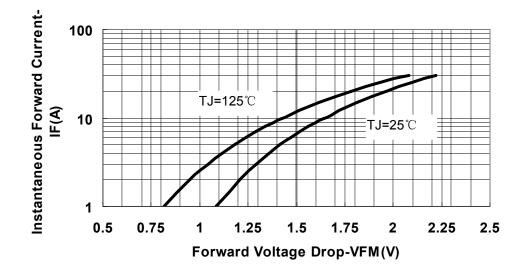


Fig.3-Typical Instantaneous Forward Voltage Characteristics

<sup>•</sup> China - Germany - Korea - Singapore - United States •

<sup>•</sup> http://www.smc-diodes.com - sales@ smc-diodes.com •

#### MURF1060CT



# Technical Data Data Sheet N0237. Rev. -

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