

Green Products

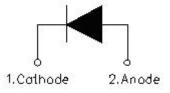
MURF1060 ULTRAFAST RECTIFIER

Applications:

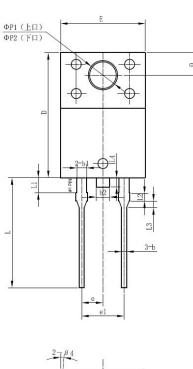
- Switching Power Supply
- Power Switching Circuits
- General Purpose

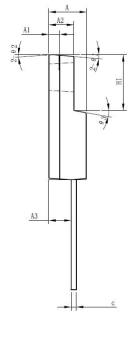
Features:

- 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





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|---|---|---|----|
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| 0::::202 | | | 1117 (7 (1 |
|---------------------------|-------|-------|--------------|
| 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 |
| С | 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 | 2.00 1.20 |
| L L1 L2 L3 L4 | 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 |
| <u>Θ1</u> Θ2 | | 5° | |
| Θ2 | | 4° | |
| Θ3 | | 10° | |
| Θ4 | | 5° | |
| Θ5 | | 5° | |

MIN.

TYP.

MAX.

SYMBOL

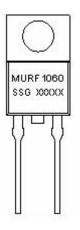
ITO-220AC(HD)

- China Germany Korea Singapore United States
 - 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)

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

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

| Device | Package | Shipping |
|----------|-----------|--------------|
| MUDE1060 | ITO-220AC | EOngo / tubo |
| MURF1060 | (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 _{RRM} V _{RWM} V _R | - | 600 | V |
| Average Forward Current | I _{F(AV)} | 50% duty cycle @TC =100℃ rectangular wave form | 10 | A |
| Peak One Cycle Non-Repetitive Surge Current | I _{FSM} | 8.3 ms, half Sine pulse | 125 | А |

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Electrical Characteristics:

| Characteristics | Symbol | Condition | Max. | Units |
|-----------------------|-----------------|--|------|-------|
| Forward Voltage Drop* | V _{F1} | @ 10A, Pulse, T _J = 25℃ | 2.2 | V |
| | V _{F2} | @ 10 A, Pulse, T _J = 100°C | 2.0 | V |
| Reverse Current* | I _{R1} | @V _R = rated VR T _J = 25℃ | 5 | μА |
| | I _{R2} | @V _R = 0.8 VR T _J = 100 ℃ | 50 | μА |
| Reverse Recovery Time | t _{rr} | I _F =500mA, I _R =1A,and I _{rm} =250mA | 50 | ns |

^{*} Pulse Width < 300µs, Duty Cycle <2%

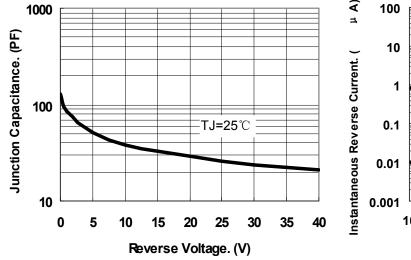
Thermal-Mechanical Specifications:

| Characteristics | Symbol | Condition | Specification | Units |
|---|------------------|--------------|---------------|------------|
| Junction Temperature | TJ | - | -55 to +150 | $^{\circ}$ |
| Storage Temperature | T _{stg} | - | -55 to +150 | $^{\circ}$ |
| Maximum Thermal Resistance Junction to Case | R _{θJC} | DC operation | 4 | °C/W |
| Approximate Weight | wt | - | 1.6 | g |
| Case Style | | ITO-220AC | | |

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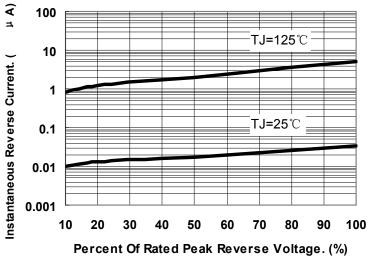


Fig.1-Typical Junction Capacitance

Fig.2-Typical Reverse Characteristics

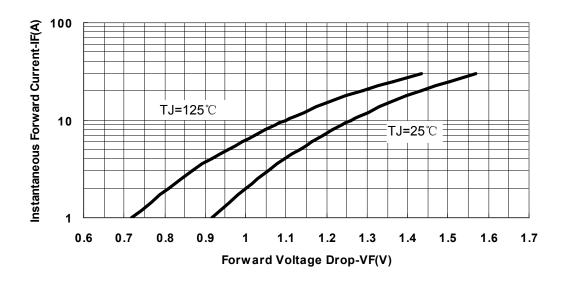


Fig.3-Typical Forward Voltage Drop Characteristics

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