

MUR1660

Green Products

Technical Data Data Sheet N0307, Rev. -

MUR1660 ULTRAFAST RECTIFIER

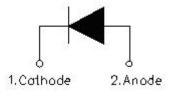
Applications:

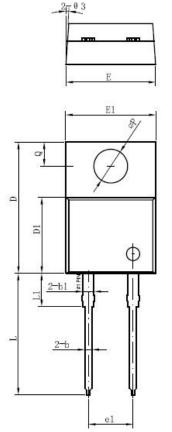
- Switching Power Supply
- Power Switching Circuits
- General Purpose

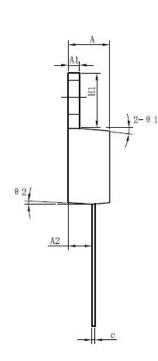
Features:

- 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 | Dimensions in millimeters | | | |
|--------|------------------------------|------------|-------|--|
| Symbol | Min. | Typical | Max. | |
| Α | 4.55 | 4.70 | 4.85 | |
| A1 | 1.17 | 1.27 | 1.37 | |
| A2 | 2.59 | 2.69 | 2.89 | |
| b | 0.71 | 0.81 | 0.96 | |
| b1 | | 1.27 | | |
| С | 0.36 | 0.38 | 0.61 | |
| D | 14.64 | 14.94 | 15.24 | |
| D1 | 8.55 | 8.07 | 8.85 | |
| Е | 10.01 | 10.16 | 10.31 | |
| E1 | 9.98 | 10.18 | 10.38 | |
| e1 | | 5.08 | | |
| H1 | 6.04 | 6.24 | 6.44 | |
| L | 13.00 | 13.86 | 14.08 | |
| L1 | | 3.80 | | |
| ΦΡ | 3.74 | 3.84 | 4.04 | |
| Q | 2.54 | 2.74 | 2.94 | |
| Θ1 | | 5° | | |
| Θ2 | | 4 ° | | |
| Θ3 | | 4° | | |

TO-220AC

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Marking Diagram:



Where XXXXX is YYWWL

| MUR | = Device Type |
|-----|--------------------------|
| 16 | = Forward Current (16A) |
| 60 | = Reverse Voltage (600V) |
| SSG | = SSG |
| ΥY | = Year |
| WW | = Week |
| L | = Lot Number |

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

Ordering Information:

| Device | Package | Shipping |
|---------|-----------------------|--------------|
| MUR1660 | 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:

| 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°C, rectangular wave form | 16 | A |
| Peak One Cycle Non-Repetitive Surge Current | I _{FSM} | 8.3ms, Half Sine pulse | 250 | A |

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Electrical Characteristics:

| Characteristics | Symbol | Condition | Max. | Units |
|-----------------------|-----------------|--|------|-------|
| Forward Voltage Drop* | V _{F1} | @ 16A, Pulse, T _J = 25°C | 1.7 | V |
| | V _{F2} | @ 16A, Pulse, T」= 150°C | 1.5 | V |
| | I _{R1} | @V _R = rated V _R | 5 | μA |
| Reverse Current* | | T _J = 25°C | | |
| | I _{R2} | @V _R = 0.8 V _R | 1 | mA |
| | | T _J = 125°C | | |
| Reverse Recovery Time | trr | I_F =500mA, I_R =1A,and I_m =250mA | 50 | ns |

* 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 _{stg} | - | -55 to +150 | °C |
| Typical Thermal Resistance Junction to Case | Rejc | DC operation | 1.5 | °C/W |
| Approximate Weight | wt | - | 1.6 | g |
| Case Style | | TO-220AC | | |



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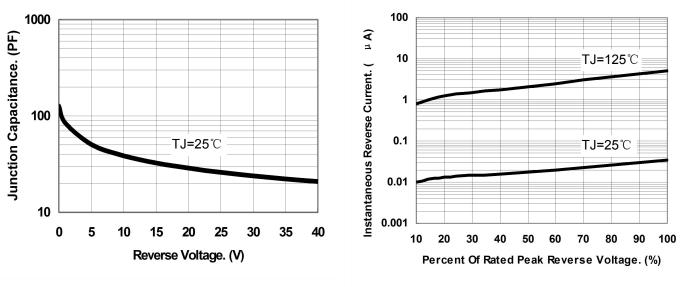


Fig.1-Typical Junction Capacitance



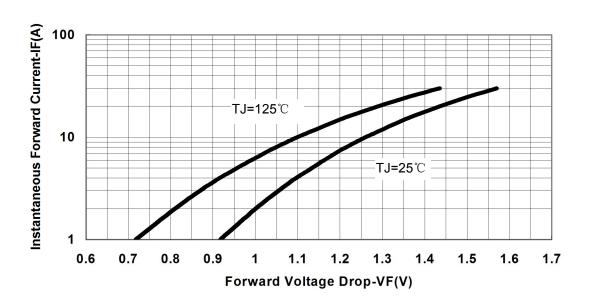


Fig.3-Typical Forward Voltage Drop Characteristics



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