YFW 佑风微

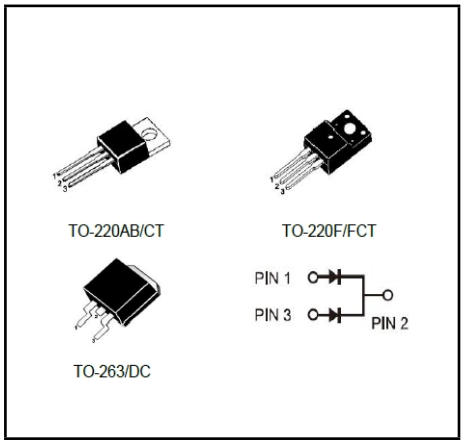
# MUR3060CT-FAC-DC

## ULTRAFST RECOVERY RECTIFIERS

**Reverse Voltage -600 V**

**Forward Current - 30 A**

lead-free ROHS




## FEATURES

- High speed switching capability
- High current capability
- High forward surge capability
- Low power losses，High efficiency
- For use in low voltage, high frequency inverters
- Lead free in comply with EU RoHS 2011/65/EU directives

## MECHANICAL DATA

- Case: TO-220AB TO-220F TO-263/DC
- Solder bath temperature275℃maximum,10s per JESD22-106

## Primary Characteristic

| | |
|---|---|
| $I_o$ | 2*15A |
| $V_{RRM}$ | 600V |
| $I_{FSM}$ | 250A |
| $V_F$ | 1.0V |
| $T_J$ Max | 150°C |

## Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

| Parameter | | Symbols | Value | Units |
|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | | $V_{RRM}$ | 600 | V |
| Maximum RMS voltage | | $V_{RMS}$ | 600 | V |
| Maximum DC Blocking Voltage | | $V_{DC}$ | 600 | V |
| Maximum Average Forward Rectified Current | Per Leg | $I_o$ | 15 | A |
| | Total | | 30 | |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave | | $I_{FSM}$ | 250 | A |
| Operating Temperature Range | | $T_J$ | 150 | °C |
| Storage Temperature Range | | $T_{STG}$ | -40 ~ +150 | °C |
| Typical Thermal Resistance (Note1) TO-220AB TO-263 TO-220F | | $R_{\theta JA}$/ $R_{\theta JC}$ | 2/4 | °C/W |

**Note1: Thermal resistance from Junction to case per leg mounted on heatsink.**

## Electrical Characteristics (Per Leg) unless otherwise specified

| Characteristics | | Symbols | Value | | Units |
|---|---|---|---|---|---|
| Forward Voltage Drop(Note2) | | $V_F$ | Typ | Max | V |
| at IF=3A | TA=25°C | | 0.92 | - | |
| | TA=125°C | | 0.73 | - | |
| at IF=5A | TA=25°C | | 0.99 | - | |
| | TA=125°C | | 0.80 | - | |
| at IF=15A | TA=25°C | | 1.20 | 1.59 | |
| | TA=125°C | | 1.00 | - | |
| Maximum Reverse Current at $V_R$=600V | TA=25°C | $I_R$ | 0.03 | 1 | uA |
| | TA=125°C | | 11 | - | uA |
| Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A | | $T_{RR}$ | - | 50 | nS |

**Note2:Pulse test: 300 μs pulse width, 1 % duty cycle**



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## RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

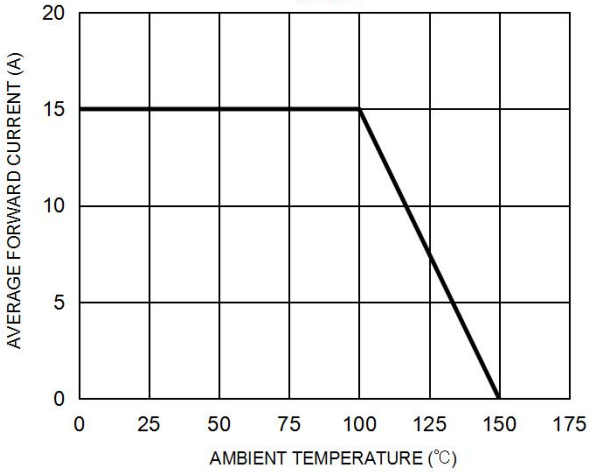



FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

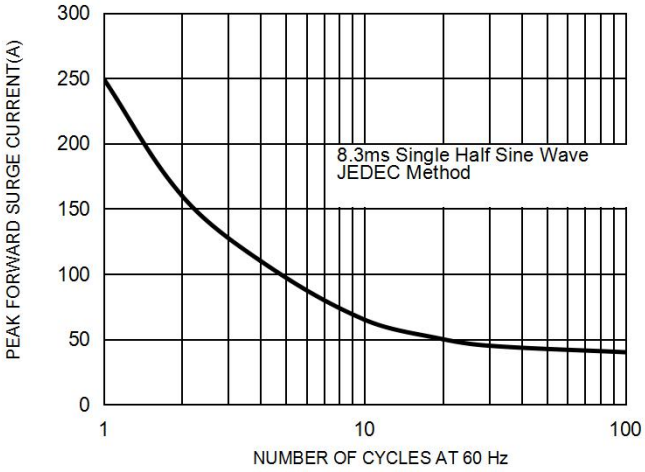



FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

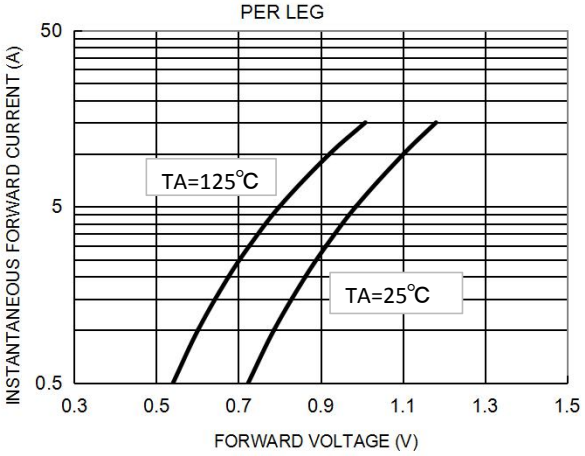
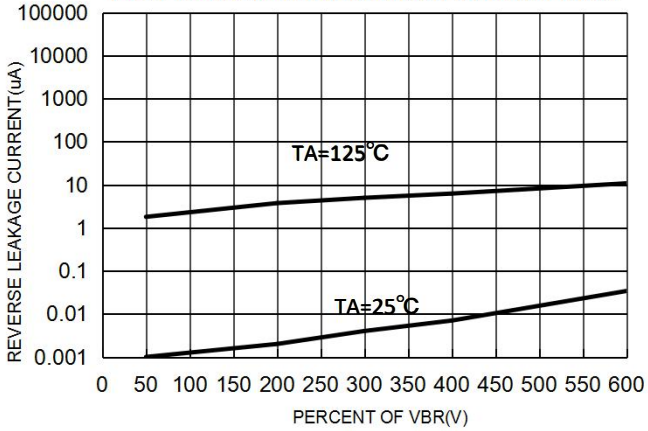
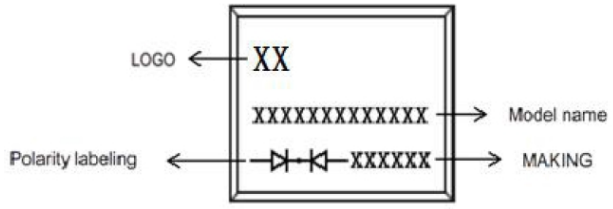
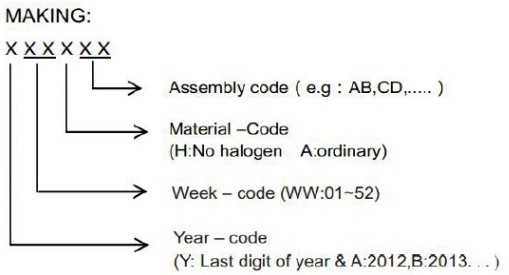



FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG




## Marking on the body




## Ordering information

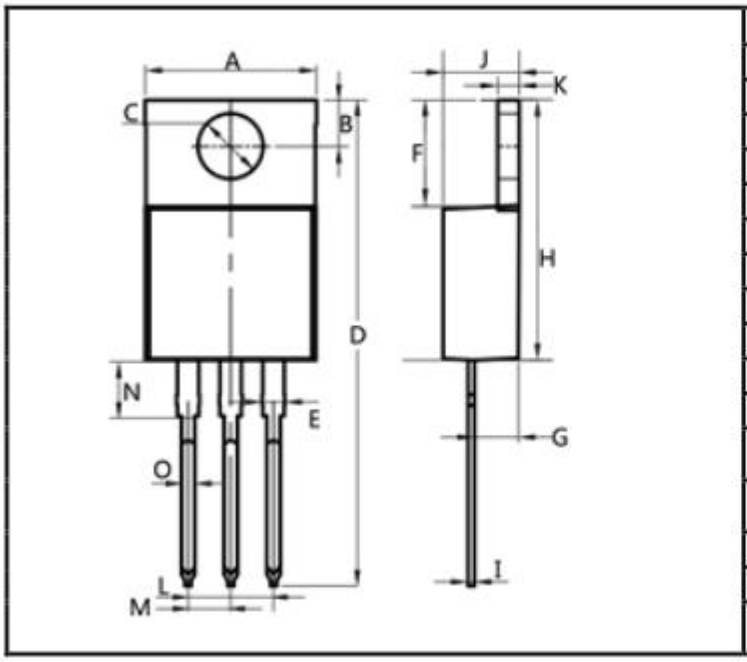
| Part Number | Package | Unit Weight | Base Quantity | Delivery mode |
|---|---|---|---|---|
| MUR3060CT | TO-220AB | 0.07oz(1.96g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| MUR3060FCT | TO-220F | 0.06oz(1.74g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| MUR3060DC | TO-263 | 0.04oz(1.16g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| MUR3060DC-R | TO-263 | 0.04oz(1.16g) | 800 pcs / reel | 800pcs/box4000pcs/carton |

**Note: For Halogen Free molding compound, add "H" suffix to part number above.**


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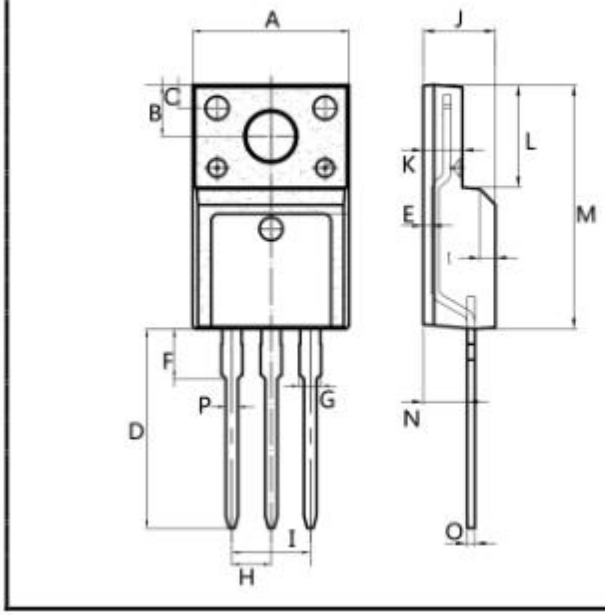
## Package Outline Dimensions millimeters

### TO-220AB




| Dim. | Min. | Max. |
|---|---|---|
| A | 10.15 | 10.35 |
| B | 2.65 | 2.95 |
| C | 3.70 | 3.90 |
| D | 28.5 | 29.5 |
| E | 1.30 | 1.45 |
| F | 6.35 | 6.55 |
| G | 2.9 | 3.3 |
| H | 15.0 | 16.0 |
| I | 0.38 | 0.42 |
| J | 4.45 | 4.55 |
| K | 1.25 | 1.35 |
| L | Typ 5.08 | |
| M | Typ 2.54 | |
| N | 3.1 | 3.3 |
| O | 0.76 | 0.84 |
| All Dimensions in millimeter | | |

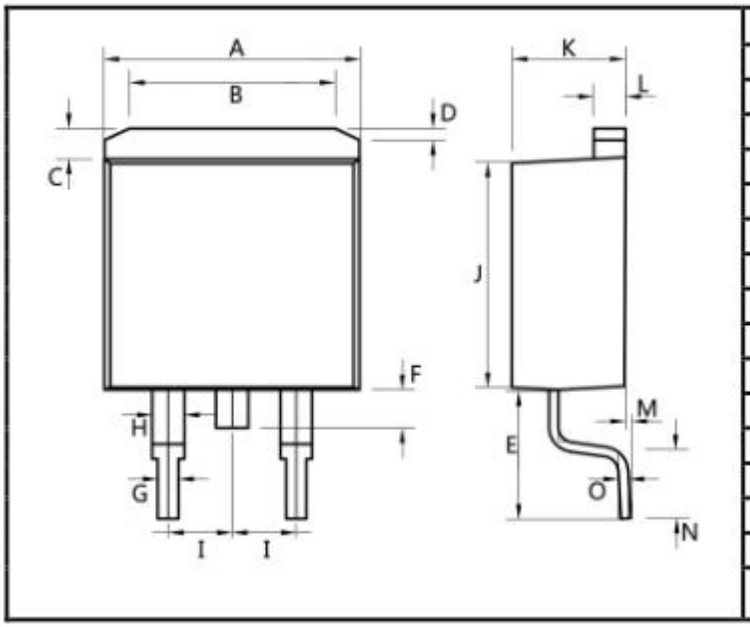
### TO-220F




| Dim. | Min. | Max. |
|---|---|---|
| A | 9.95 | 10.25 |
| B | 2.95 | 3.25 |
| C | 1.25 | 1.45 |
| D | 12.95 | 13.25 |
| E | 0.50 | 0.65 |
| F | 3.1 | 3.3 |
| G | 1.30 | 1.45 |
| H | Typ 2.54 | |
| I | Typ 5.08 | |
| J | 4.60 | 4.75 |
| K | 2.50 | 2. 65 |
| L | 6.35 | 6.55 |
| M | 15.4 | 16.0 |
| N | 2.75 | 3.05 |
| O | 0.48 | 0.52 |
| P | 0.76 | 0.84 |
| All Dimensions in millimeter | | |


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TO-263




| Dim. | Min. | Max. |
|---|---|---|
| A | 10.1 | 10. 2 |
| B | 7.4 | 7.6 |
| C | 1.3 | 1.5 |
| D | 0.55 | 0.75 |
| E | 5.0 | 6.0 |
| F | 1.4 | 1.6 |
| G | 0.78 | 0.86 |
| H | 1.2 | 1.3 |
| I | Typ 2.54 | |
| J | 8.4 | 8.6 |
| K | 4.45 | 4.55 |
| L | 1.25 | 1.35 |
| M | 0.02 | 0.1 |
| N | 2.4 | 2.8 |
| O | 0.36 | 0.40 |
| All Dimensions in millimeter | | |


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