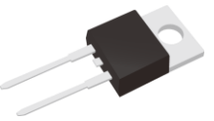
# MUR1560 / MUR1560D / MUR1560F

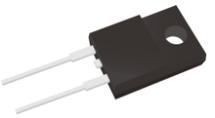
## SUPERFAST RECOVERY RECTIFIERS

**Voltage** 600 V **Current** 15 A

MUR1560 TO-220AC



MUR1560F ITO-220AC



MUR1560D TO-263

### Features

- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Exceeds environmental standards of MIL-S-19500/228
- Hermetically sealed.
- Low leakage
- High surge capacity
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Lead free in compliance with EU RoHS 2011/65/EU directive

### Mechanical Data

- Case: Molded plastic, TO-220AC, ITO-220AC, TO-263
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- TO-220AC Approx. Weight: 0.067 ounces, 1.89 grams
- ITO-220AC Approx. Weight: 0.055 ounces, 1.56 grams
- TO-263 Approx. Weight: 0.051 ounces, 1.46 grams
- Marking: Part number

### Maximum Ratings ($T_A$=25°C unless otherwise noted)

| PARAMETER | SYMBOL | LIMIT | UNIT |
|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 600 | V |
| Maximum rms voltage | $V_{RMS}$ | 420 | V |
| Maximum dc blocking voltage | $V_R$ | 600 | V |
| Maximum average forward current | $I_{F(AV)}$ | 15 | A |
| Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 150 | A |
| Maximum forward voltage at 15A | $V_F$ | 1.5 | V |
| Maximum dc reverse current at rated dc blocking voltage | $I_R$ | 5 | μA |
| Operating and storage temperature range | $T_J$, $T_{STG}$ | -55 to +175 | °C |

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## Maximum Ratings ($T_A$=25°C unless otherwise noted)

| PARAMETER | | SYMBOL | LIMIT | UNIT |
|---|---|---|---|---|
| Maximum reverse recovery time | (Note 3) | $T_{RR}$ | 50 | ns |
| Typical thermal resistance | TO-220AC(Note 1) | $R_{\theta JC}$ | 2.5 | °C/W |
| | ITO-220AC (Note 1) | $R_{\theta JC}$ | 6.5 | |
| | TO-263(Note 2) | $R_{\theta JC}$ | 5 | |

Note : 1. Device mounted on a infinite heatsink, then measured the center of the marking side.
2. Mounted on a 10cm*10cm*1mm copper pad area
3. Reverse Recovery Test Conditions : $I_F$=0.5A, $I_R$=1A, Recover to 0.25A

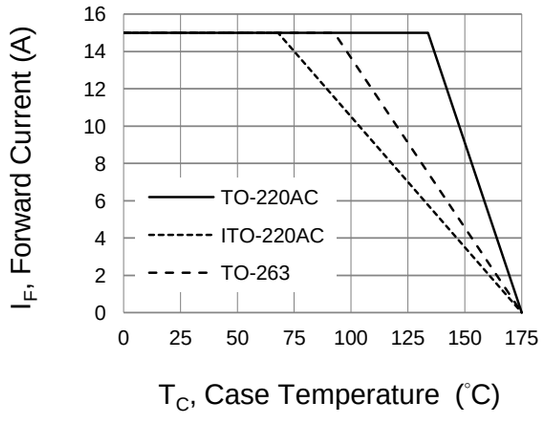


**Fig.1 Forward Current Derating Curve**

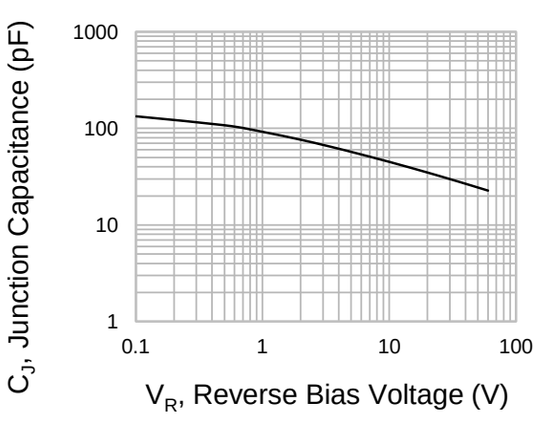


**Fig.2 Typical Junction Capacitance**

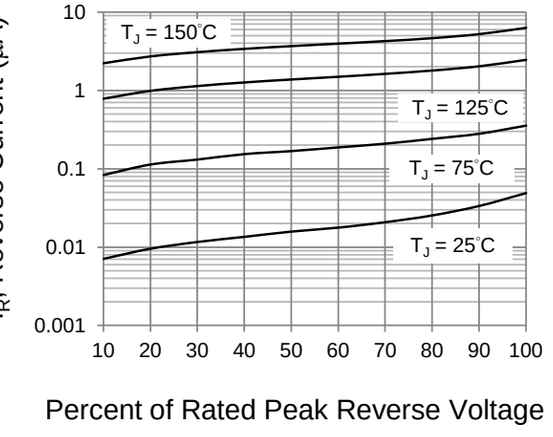


**Fig.3 Typical Reverse Characteristics**

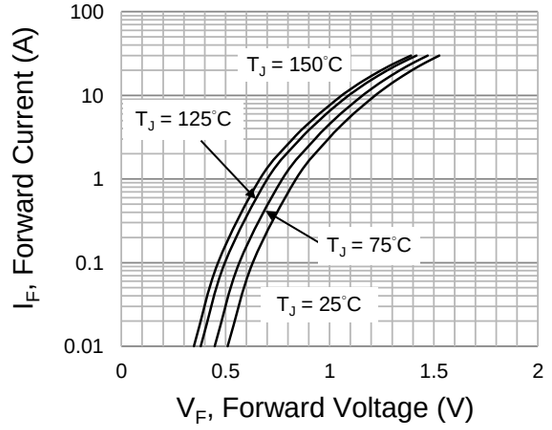


**Fig.4 Typical Forward Characteristics**

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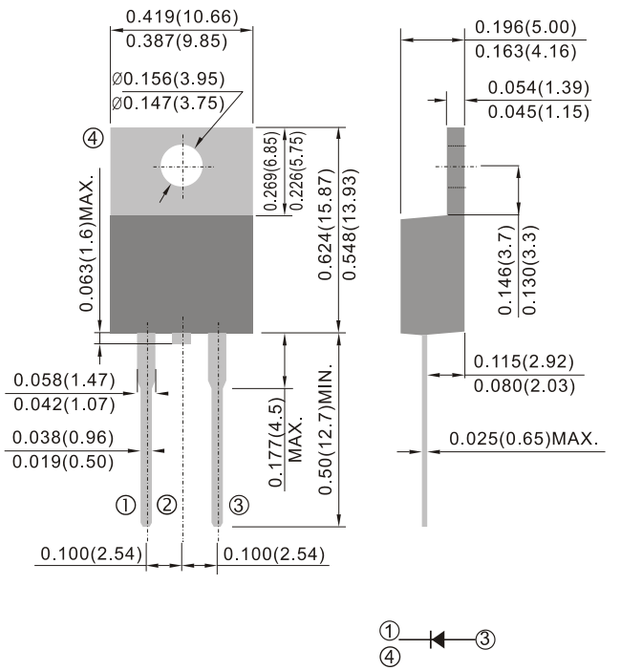
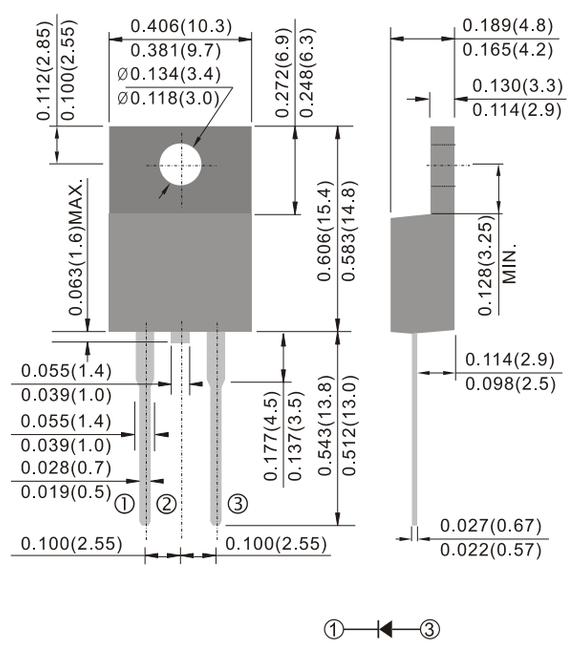
## TO-220AC

Unit : inch(mm)



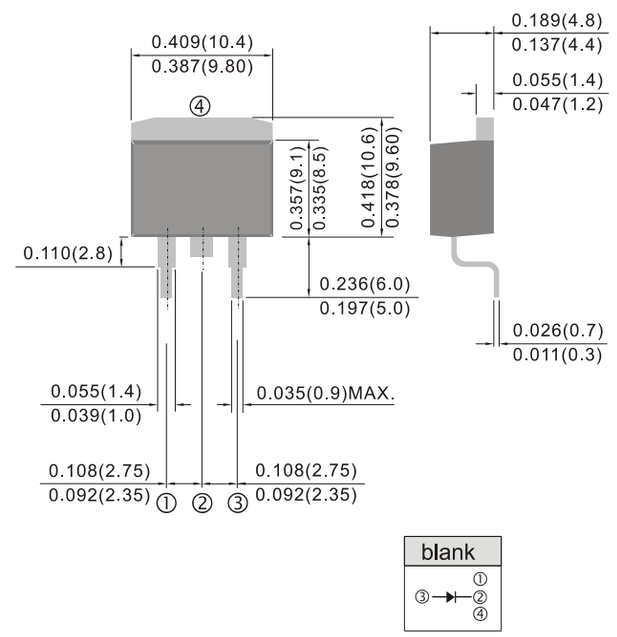

## ITO-220AC

Unit : inch(mm)




## TO-263 / D²PAK

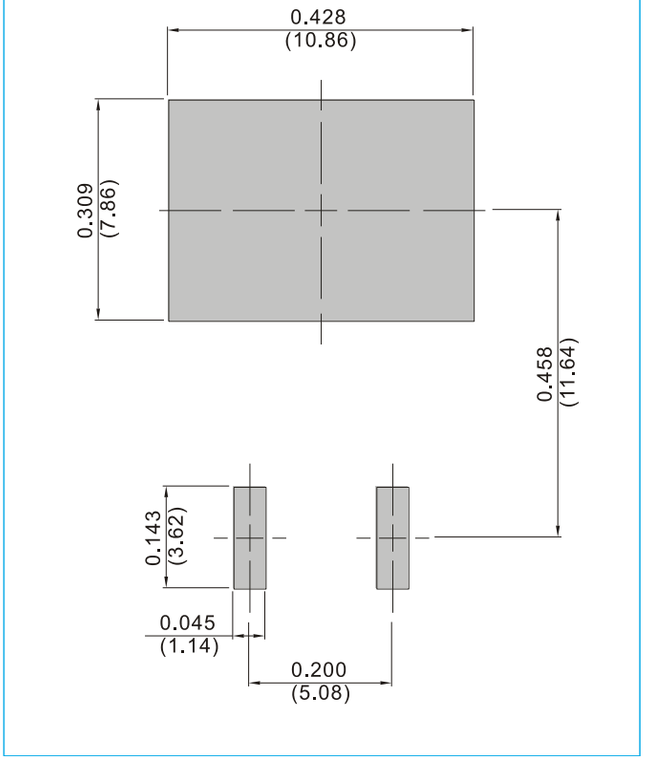
Unit : inch(mm)



# MUR1560 / MUR1560D / MUR1560F

## MOUNTING PAD LAYOUT

TO-263 / D²PAK Unit：inch(mm)




## ORDER INFORMATION

- Packing information
  T/R – 0.8K per 13" plastic Reel

# MUR1560 / MUR1560D / MUR1560F

**Part No_packing code_Version**

MUR1560_T0_00001
MUR1560_T0_10001
MUR1560F_T0_00001
MUR1560F_T0_10001
MUR1560D_R2_00001
MUR1560D_R2_10001

**For example :**

**RB500V-40_R2_00001**

- Part No.
- Packing type means T/R
- Packing size code means 13"
- Version code means HF
- Serial number

| Packing Code XX | | | | Version Code XXXXX | | |
|---|---|---|---|---|---|---|
| Packing type | 1st Code | Packing size code | 2nd Code | HF or RoHS | 1st Code | 2nd~5th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |

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