



MBR30H150CT \ MBR30H150FCT \ MBR30H150DC SERIES

ULTRA LOW IR SCHOTTKY BARRIER RECTIFIERS

Voltage

150 V

Current

30 A

Features

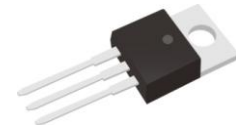
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- High current capability
- High junction temperature capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

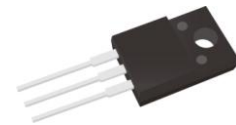
- Case: TO-220AB, ITO-220AB, TO-263 package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- TO-220AB Weight: 0.067 ounces, 1.89 grams.
- ITO-220AB Weight: 0.056 ounces, 1.6 grams.
- TO-263 Weight: 0.049 ounces, 1.38 grams.
- Marking: Part number

| | |
|-----------|--------------|
| | 150V |
| TO-220AB | MBR30H150CT |
| TO-263 | MBR30H150DC |
| ITO-220AB | MBR30H150FCT |

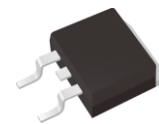
TO-220AB



ITO-220AB



TO-263



Maximum Ratings And Electrical Characteristics (T_A=25°C unless otherwise noted)

| PARAMETER | | SYMBOL | 150V | UNIT |
|---|-----------------------|--------------------|-------------|------|
| Maximum repetitive peak reverse voltage | | V _{RRM} | 150 | V |
| Maximum rms voltage | | V _{RMS} | 105 | V |
| Maximum dc blocking voltage | | V _R | 150 | V |
| Maximum average forward rectified current | per device | I _{F(AV)} | 30 | A |
| | per diode | | 15 | |
| Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load per diode | | I _{FSM} | 275 | A |
| Maximum forward voltage at 15A per diode | | V _F | 0.85 | V |
| Maximum dc reverse current at rated dc blocking voltage | T _J =25°C | I _R | 0.8 | μA |
| | T _J =125°C | | 1 | mA |
| Typical thermal resistance | TO-220AB(Note 1) | R _{θJC} | 3 | °C/W |
| | TO-263(Note 1) | | 3 | |
| | ITO-220AB(Note 1) | | 7 | |
| Operating junction temperature range | | T _J | -55 to +175 | °C |
| Storage temperature range | | T _{STG} | -55 to +175 | °C |

Note : 1. Device mounted on a infinite heatsink , then measured the center of the marking side.



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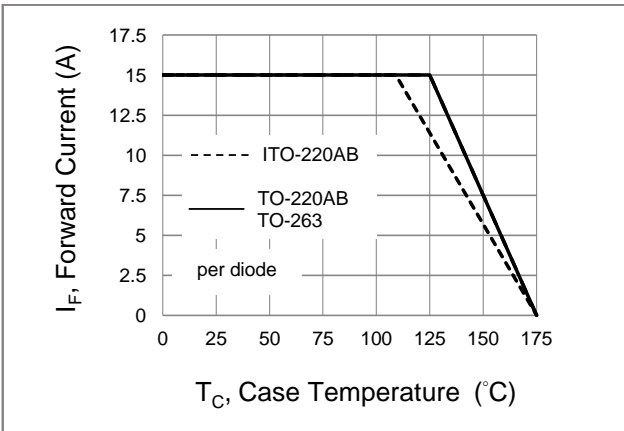


Fig.1 Forward Current Derating Curve

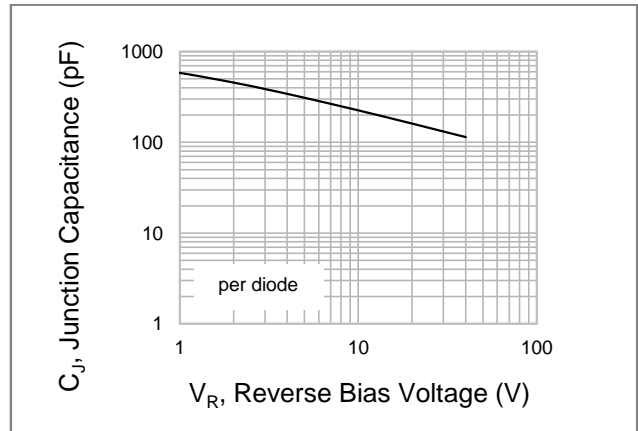


Fig.2 Typical Junction Capacitance

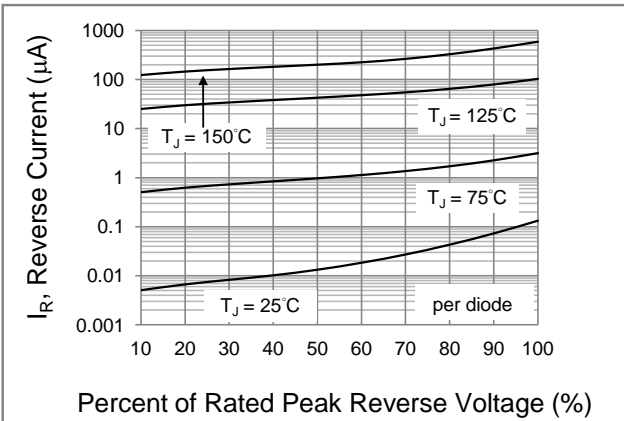


Fig.3 Typical Reverse Characteristics

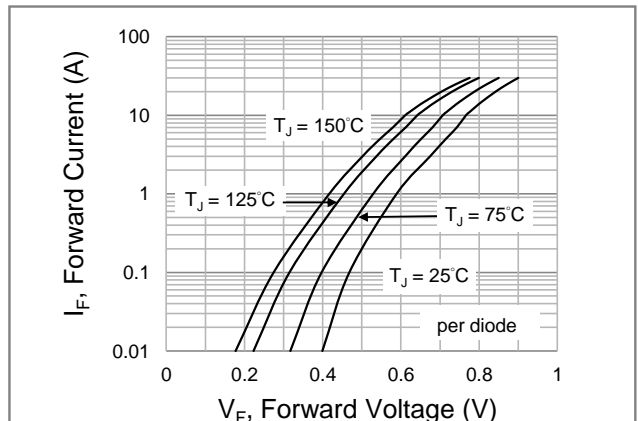
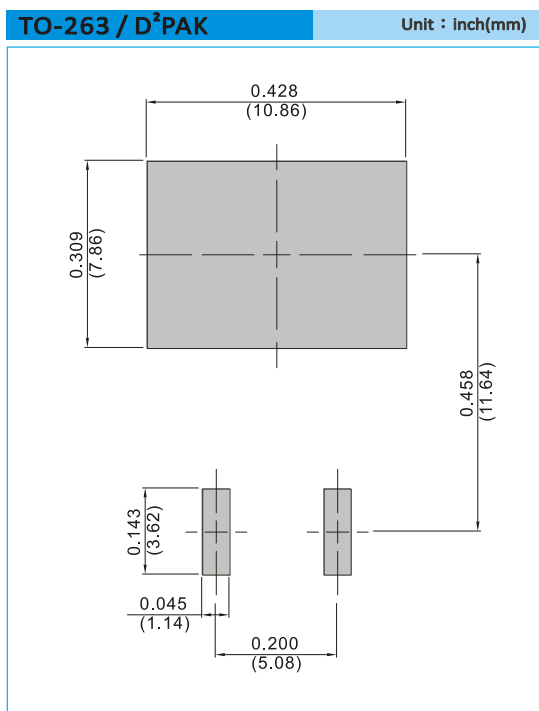


Fig.4 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

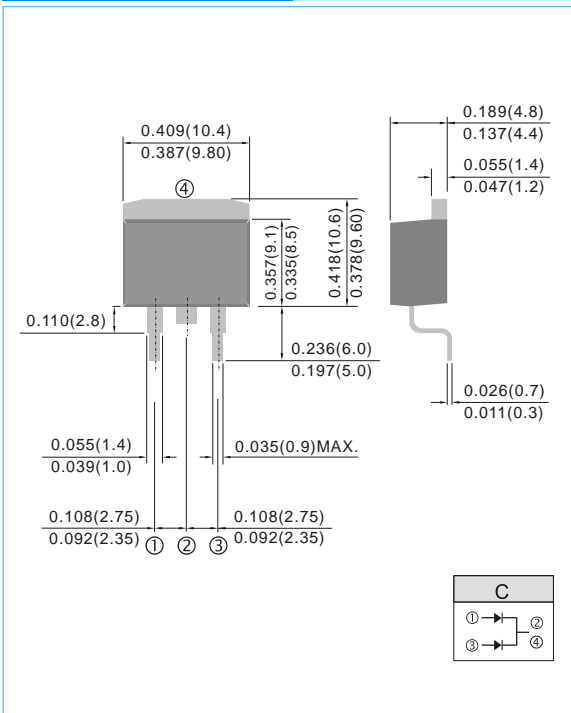
- Packing information
T/R – 0.8K per 13" plastic Reel



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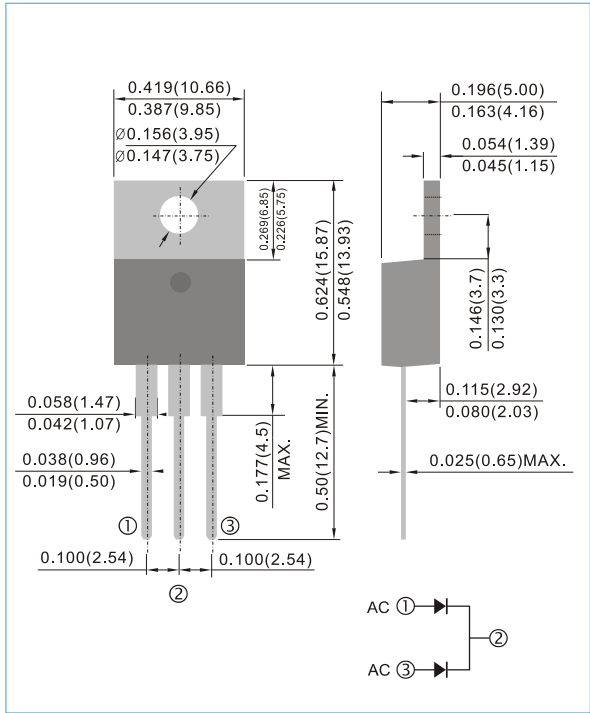
TO-263 / D²PAK

Unit : inch(mm)



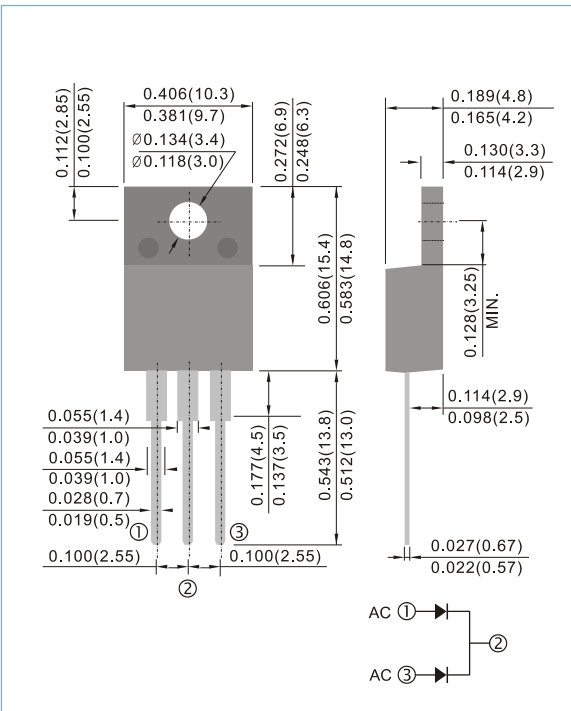
TO-220AB

Unit : inch(mm)



ITO-220AB

Unit : inch(mm)





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Part No_packing code_Version

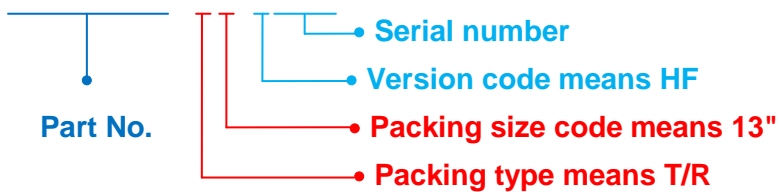
MBR30H150CT_T0_00001

MBR30H150DC_R2_00001

MBR30H150FCT_T0_00001

For example :

RB500V-40_R2_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th 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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