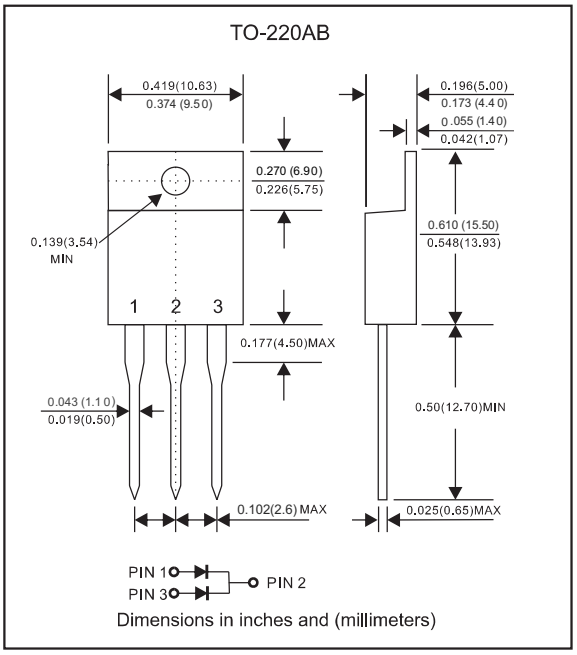
# MBR30L150CT

**30A Low VF Surface Mount Schottky Barrier Rectifiers 150V**

## Features

- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge current capability
- Guard-ring for overvoltage protection
- Suffix "-H" indicates Halogen-free parts,ex.MBR30L150CT-H

## Package outline




## Mechanical data

- Epoxy:UL 94-V0 rated flame retardant
- Case:JEDEC TO-220AB molded plastic body over passivated chip
- Lead :Axialleads,solderable per MIL-STD -202, Method 208 guranteed
- Polarity :Color band denotes cathode end
- Mounting Position :Any

## Maximum ratings and Electrical Characteristics (AT $T_A$=25°C unless otherwise noted)

Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20%

| PARAMETER | CONDITIONS | Symbol | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|
| Forward rectified current | $T_C$ = 95°C See Fig.1 | $I_O$ | | | 30 | A |
| Forward surge current | 8.3ms single half sine-wave (JEDEC methode) | $I_{FSM}$ | | | 250 | A |
| Reverse current | $V_R = V_{RRM}$ $T_J$ = 25°C | $I_R$ | | | 0.1 | mA |
| | $V_R = V_{RRM}$ $T_J$ = 100°C | | | | 15 | |
| Storage temperature | | $T_{STG}$ | - 55 | | +150 | °C |

| SYMBOLS | $V_{RRM}$ *1 (V) | $V_{RMS}$ *2 (V) | $V_R$ *3 (V) | $V_F$ *4 (V) | Operating temperature $T_J$, (°C) |
|---|---|---|---|---|---|
| MBR30L150CT | 150 | 105 | 150 | 0.85 | -55 to +150 |

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage
IF = 15.0A

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## ATING AND CHARACTERTIC CURVES

FIG. 1 – FORWARD CURRENT DERATING CURVE

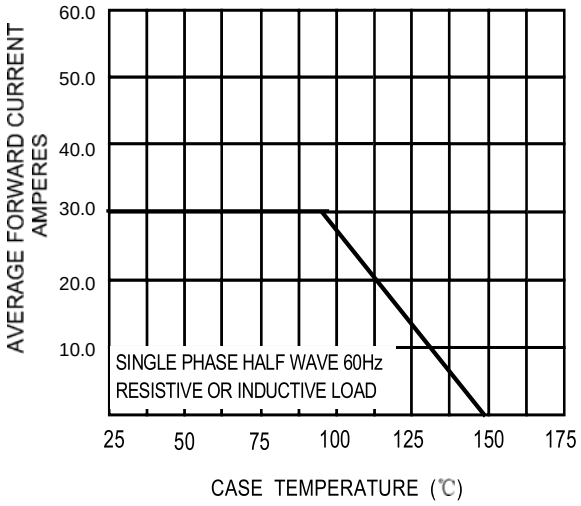



FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

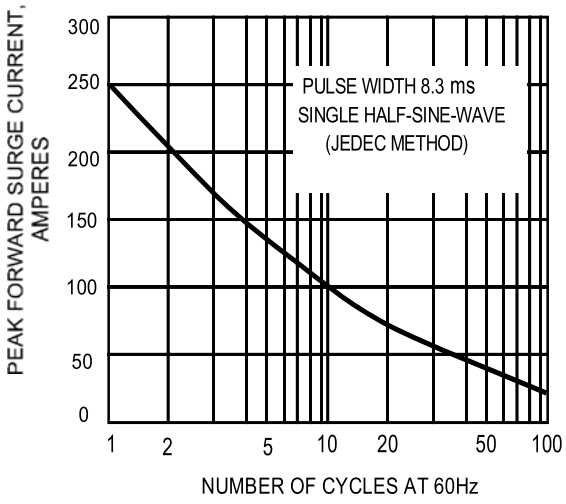



FIG.3-TYPICAL REVERSE CHARACTERISTICS

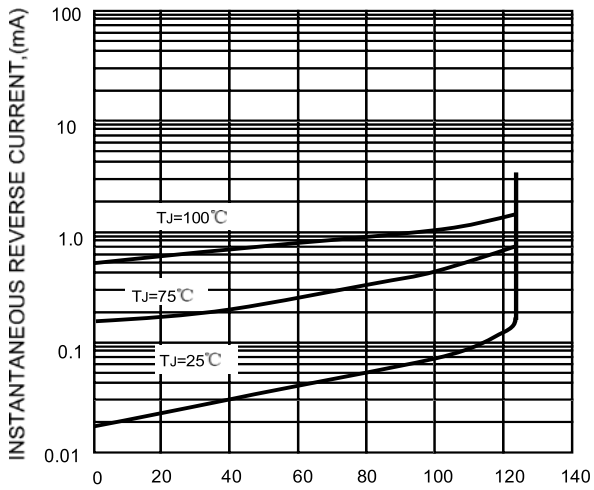
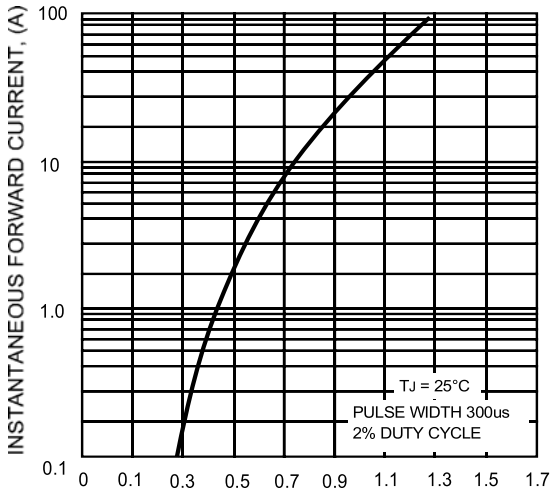



FIG.4-TYPICAL FORWARD CHARACTERISTICS



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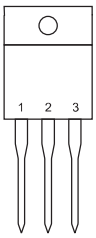
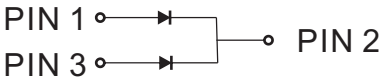
## Pinning information

| Pin | Simplified outline | Symbol |
|---|---|---|
| Pin1 anode<br>Pin2 cathode<br>Pin3 anode |  |  |

## Marking

| Type number | Marking code |
|---|---|
| MBR30L150CT | MBR30L150CT |