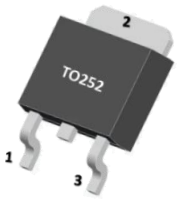
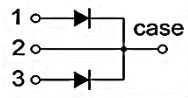
## ■ DESCRIPTION

The MBR3065CS meet the ROHS and Green Product requirement with full function reliability approved.




1. ANODE
2. CATHODE
3. ANODE




## ■ FEATURE

* Schottky Barrier Chip
* Guard Ring Die Construction for Transient Protection
* Low Power Loss,High Efficiency
* High Surge Capability
* High Current Capability and Low Forward Voltage Drop
* For Use in Low Voltage, High Frequency Inverters,Free Wheeling, and Polarity Protection Applications

## ■ ABSOLUTE MAXIMUM RATINGS(TA=25°C, unless otherwise specified.)

| SYMBOL | PARAMETER | | VALUE | UNIT |
|---|---|---|---|---|
| VRRM | Peak repetitive reverse voltage | | 65 | V |
| VRWM | Working peak reverse voltage | | | |
| VR | DC blocking voltage | | | |
| VR(RMS) | RMS reverse voltage | | 45.5 | V |
| IO | Average rectified output current | | 30（15*2） | A |
| IFSM | Non-Repetitive peak forward surge current (8.3ms half sine wave) | | 200*2 | A |
| RΘJc | Thermal resistance from junction to case ,Tc=25℃ | TO-252 | 2 | ℃/W |
| | | TO-220F | 3.0 | |
| RΘJA | Thermal resistance from junction to ambient | TO-252 | 110 | ℃/W |
| | | TO-220F | 62.5 | |
| Tj | Junction temperature | | 150 | ℃ |
| Tstg | Storage temperature | | -55~+150 | ℃ |

Notes:Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

## ■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|---|
| Reverse voltage | V(BR) | I R=0.2mA | | 65 | | | V |
| Reverse current | IR | VR=65V | Tj =25℃ | | | 200 | uA |
| | | | Tj =125℃ | | 5.0 | | mA |
| Forward voltage | VF | I F=15A | Tj =25℃ | | | 0.85 | V |
| | | I F=30A | Tj =25℃ | | | 0.95 | V |
| *Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%. | | | | | | | |

## ■ TYPICAL CHARACTERISTICS

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

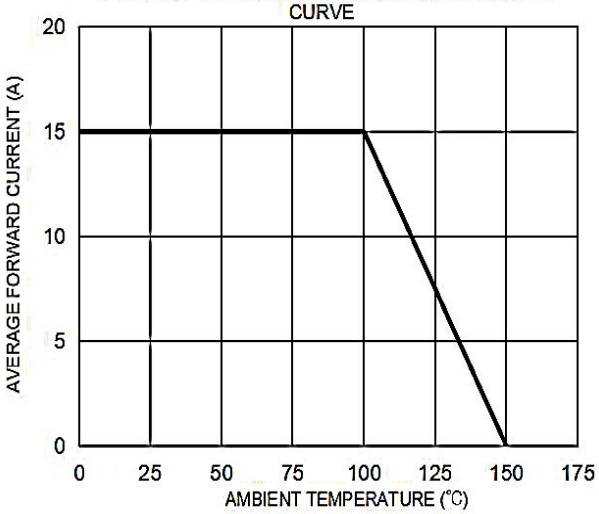



FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

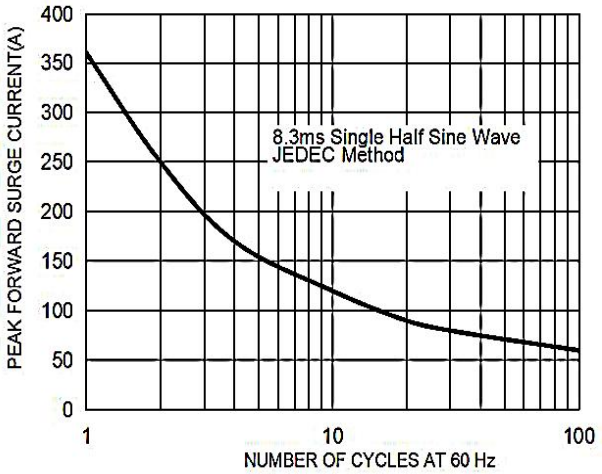



FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

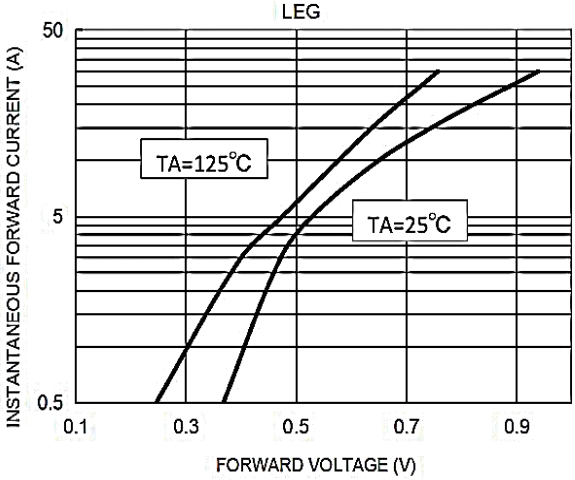
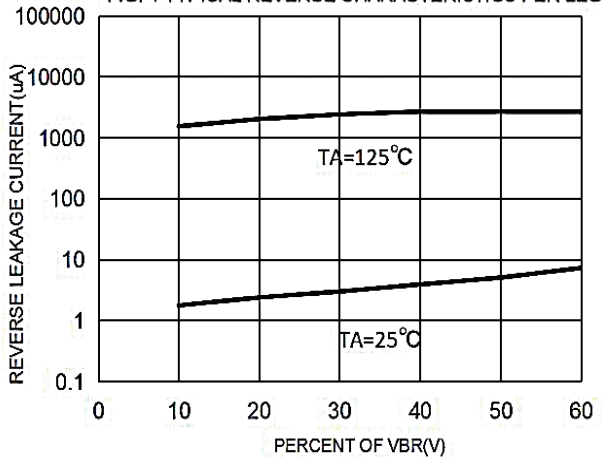
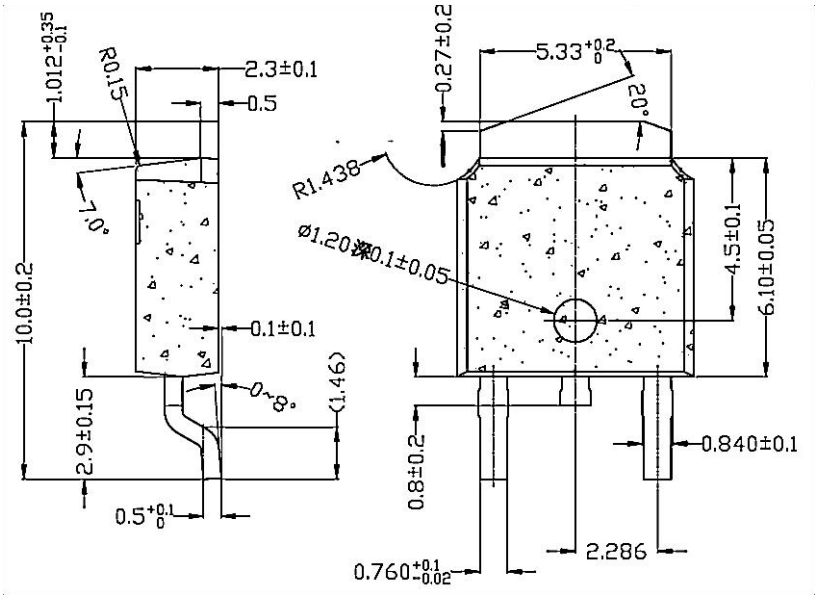
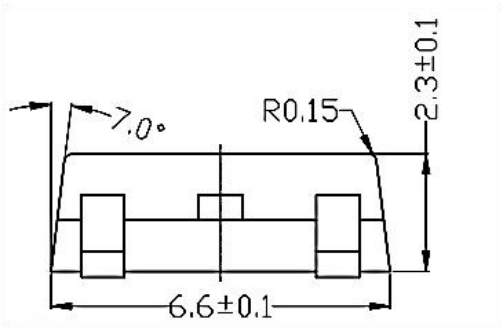



FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



## ■ TO - 252 Package Outline Dimensions




## ■ TO - 252 Packing Information

| Package version | Reel dimensions Φ×H (mm) | Per Reel (pcs) | Reels per box | Inner box dimensions L×W×H(mm) | Outer box (pcs) | Outer box dimensions L×W×H (mm) |
|---|---|---|---|---|---|---|
| TO-252 | Φ330*20 | 2500 | 2 | 360*340*50 | 25000 | 375*375*280 |