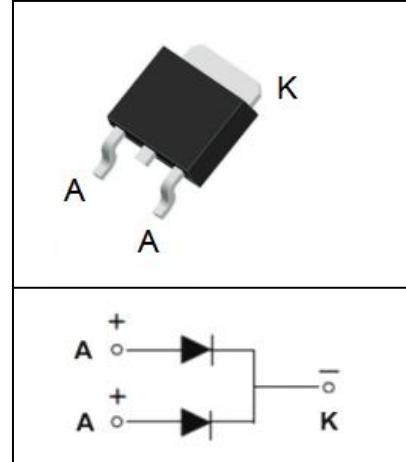


**MBR20150DR****Dual High Voltage Schottky Rectifier****●Features:**

- Common Cathode Structure
- Low Power Loss and High Efficiency
- Low Forward Voltage Drop
- High Surge Capability

●Application:

- High Frequency Switch
- Free Wheeling, and Polarity Protection Applications

**Absolute Maximum Ratings(Tc=25°C unless otherwise noted)**

| Symbol | Parameter | Value | Unit |
|--------------------|--|-------------------------------|------|
| V _{RRM} | Maximum Repetitive Reverse Voltage | 150 | V |
| V _R | Maximum DC Reverse Voltage | 150 | V |
| I _{F(AV)} | Average Rectified Forward Current, Tc=120°C | 10(Per Leg) 20(Per Device) | A |
| I _{FSM} | Peak Forward Surge Current, 8.3ms Half Sine wave | 170 | A |
| T _j | Operating Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -55 to +150 | °C |

Thermal Characteristics(Tc=25°C unless otherwise noted)

| Symbol | Parameter | Max | Unit |
|------------------|--|-----|-------|
| R _{θJC} | Thermal Resistance, Junction to Case Per Leg | 2.7 | °C /W |

Electrical Characteristics(Tc=25°C unless otherwise noted)

| Symbol | Parameter | Test Conditions | Min | Max | Unit |
|------------------|------------------------------------|--|-----|------------------------------|------|
| V _{RRM} | Maximum Repetitive Reverse Voltage | I _R =100μA | 150 | | V |
| I _R | Reverse Current | V _R =150V Tc=25°C V _R =150V Tc=125°C | | 0.1 5 | mA |
| V _F | Forward Voltage | I _F =10A Tc=25°C I _F =10A Tc=125°C I _F =20A Tc=25°C I _F =20A Tc=125°C | | 0.93 0.83 1.03 0.93 | V |

VF Typical Values: 0.83V@ IF=10A, Tc=25°C



MBR20150DR

Dual High Voltage Schottky Rectifier

Typical Performance Characteristics

Figure 1. Forward Current Characteristics

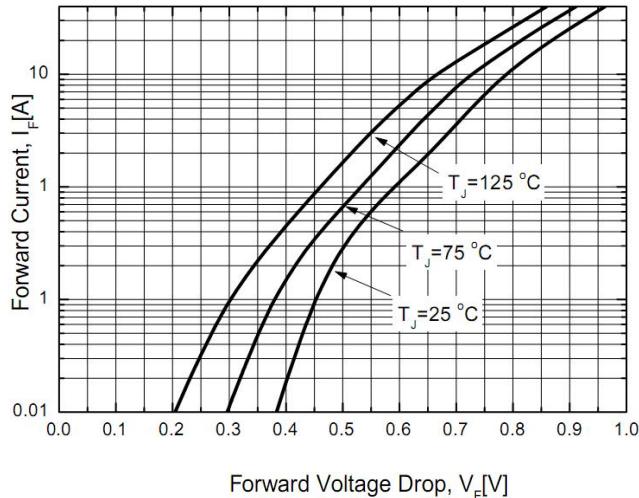


Figure 2. Reverse Leakage Current

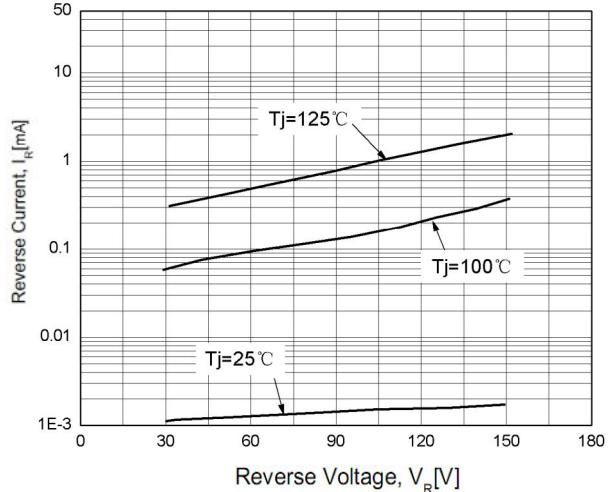


Figure 3. Junction Capacitance

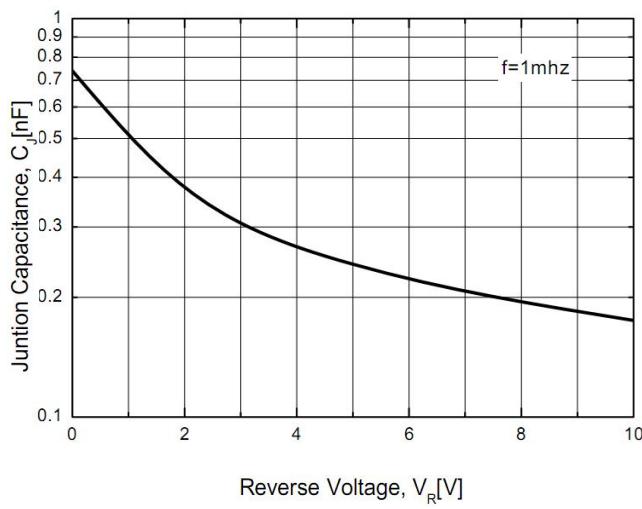
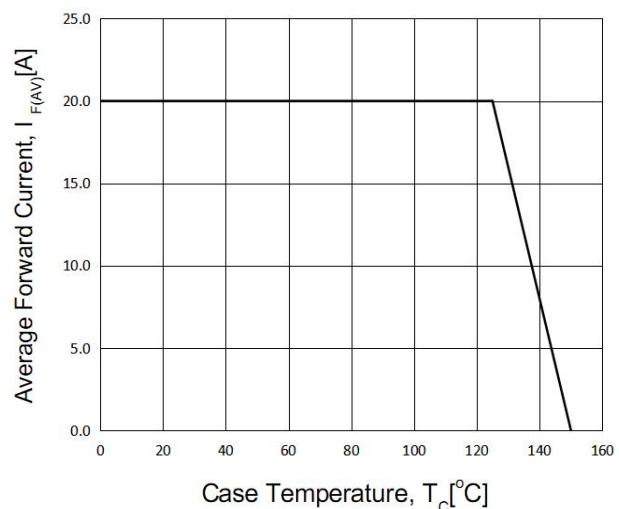


Figure 4. Power Derating





MBR20150DR

Dual High Voltage Schottky Rectifier

TO-252 Package Dimensions

UNIT: mm

| SYMBOL | min | nom | max | SYMBOL | min | nom | max |
|--------|------|-----|------|--------|------|------|-------|
| A | 6.40 | | 6.60 | D | 2.90 | | 3.10 |
| A1 | 5.20 | | 5.40 | D1 | 0.45 | | 0.55 |
| A2 | 4.40 | | 4.60 | D2 | 0.45 | | 0.55 |
| A3 | 4.40 | | 4.60 | e | | 2.30 | |
| A4 | 0 | | 0.15 | E | 2.20 | | 2.40 |
| A5 | 4.65 | | 4.95 | F | 0.45 | | 0.55 |
| B | 5.90 | | 6.20 | G | | 1.70 | |
| B1 | 1.57 | | 1.77 | L | 1.40 | | 1.60 |
| C | 0.90 | | 0.96 | θ (度) | 0 | | 10.00 |

