

MBRF20200CT

Product profile

Dual Common-Cathode Ultra Low VF Schottky Rectifier

General description

Rectifiers 20 Amp 200V

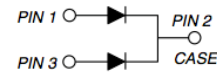
Features

- Guard ring for overvoltage protection
- Lower power losses, high efficiency
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High frequency operation
- Solder Dip 260 °C, 40 s
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/EC

Typical applications

For use in high frequency rectifier of switching mode power supplies, freewheeling diodes, dc-to-dc converters or polarity protection application.

ITO-220AB



Mechanical data

Case: ITO-220AB

Molding compound meets UL 94 V-0 flammability rating

Terminals: Matte tin plated leads, solderable per meets

JESD 201

Polarity: As marked

Weight: 2.3 grams

Mounting Torque: 10 in-lbs maximum

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

| Parameter | Symbol | MBRF20200CT | Unit |
|---|--------|-------------|------|
| Maximum repetitive peak reverse voltage | VRRM | 200 | V |
| RMS Voltage (Max.) | VRMS | 140 | V |
| Working peak reverse voltage | VRWM | 200 | V |
| Maximum average forward rectified current | IF(AV) | 20 | A |
| Peak forward surge current | IFSM | 100 | A |
| 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | | | |
| Operating junction temperature range | TJ | -55 to +150 | °C |
| Storage temperature range | TSTG | -55 to +150 | °C |

THERMAL CHARACTERISTICS

| Parameter | Symbol | Value | Unit |
|----------------------------|--------|-------|------|
| Typical thermal resistance | RθJC | 4.5 | °C/W |

Notes: (1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

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

OFF CHARACTERISTICS

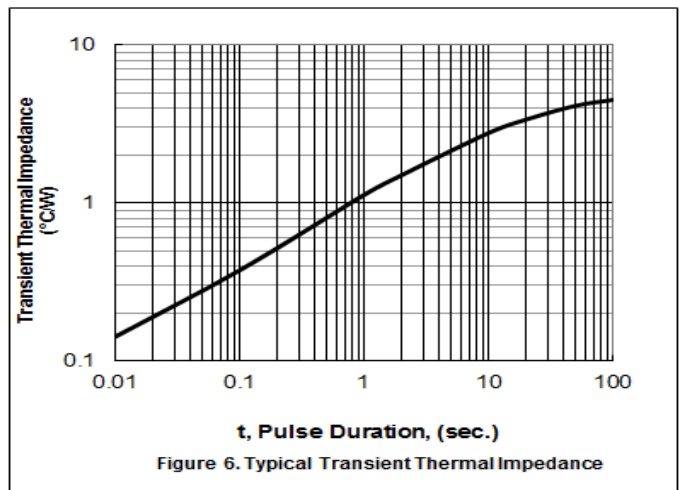
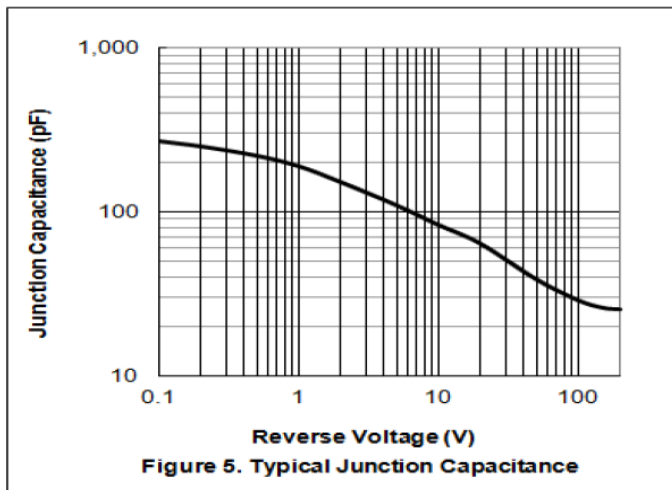
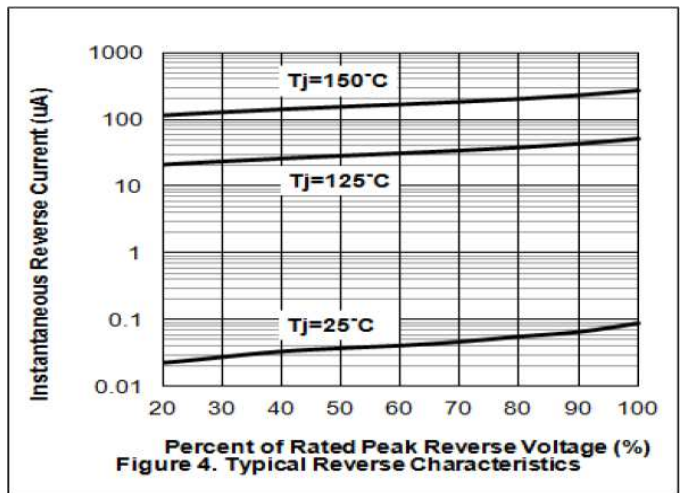
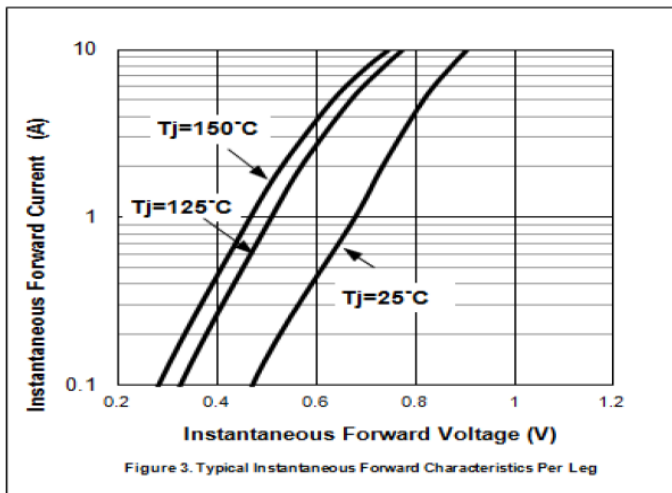
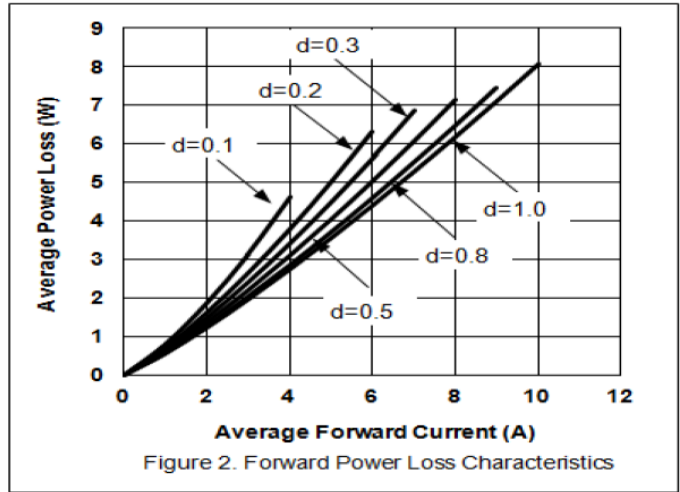
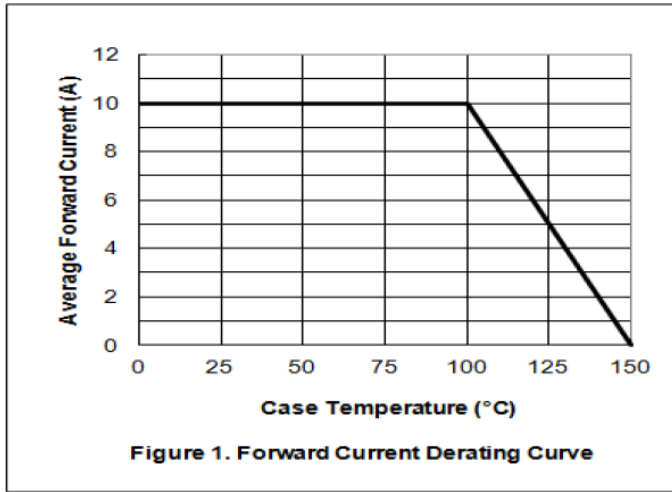
| Parameter | Symbol | Value | | Unit |
|---|--------|---------|------|------|
| | | Typical | Max | |
| Instantaneous forward voltage at IF=5A, Tj=25°C at IF=10A, Tj=25°C at IF=5A, Tj=125°C at IF=10A, Tj=125°C | VF | 0.81 | 0.87 | V |
| | | 0.90 | 1.05 | |
| | | 0.67 | 0.72 | |
| | | 0.78 | 0.88 | |
| Maximum reverse current Tj=25°C | IR | 10 | | u'A |
| at working peak reverse voltage Tj=125°C | | 2 | | m'A |

DEVICE MARK

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■ Characteristic Curves



MBRF20200CT

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