



MBRF830CT THRU MBRF8100CT

Isolation 8.0 AMPS. Schottky Barrier Rectifiers



Voltage Range
30 to 100 Volts
Current
8.0 Amperes

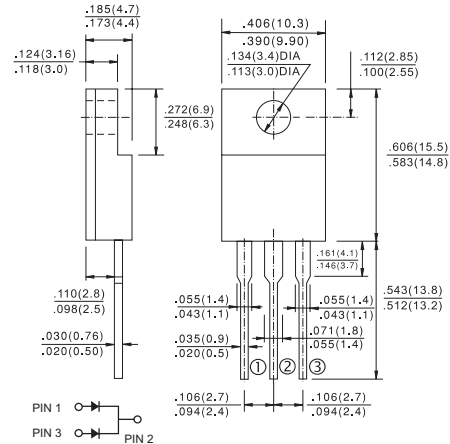
Features

- ✦ Plastic material used carries Underwriters Laboratory Classifications 94V-0
- ✦ Metal silicon junction, majority carrier conduction
- ✦ Low power loss, high efficiency
- ✦ High current capability, low forward voltage drop
- ✦ High surge capability
- ✦ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ✦ Guarding for overvoltage protection
- ✦ High temperature soldering guaranteed:
260°C/10 seconds, 0.25"(6.35mm) from case

Mechanical Data

- ✦ Cases: ITO-220AB molded plastic
- ✦ Terminals: Leads solderable per MIL-STD-750, Method 2026
- ✦ Polarity: As marked
- ✦ Mounting position: Any
- ✦ Mounting torque: 5 in. - lbs. max
- ✦ Weight: 0.08 ounce, 2.24 grams

ITO-220AB



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Type Number | Symbol | MBRF 830CT | MBRF 835CT | MBR 840CT | MBRF 845CT | MBRF 850CT | MBRF 860CT | MBRF 8100CT | Units |
|---|-----------------|-------------|------------|-----------|------------|------------|------------|-------------|--------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 30 | 35 | 40 | 45 | 50 | 60 | 100 | V |
| Maximum RMS Voltage | V_{RMS} | 21 | 24 | 28 | 31 | 35 | 42 | 70 | V |
| Maximum DC Blocking Voltage | V_{DC} | 30 | 35 | 40 | 45 | 50 | 60 | 100 | V |
| Maximum Average Forward Rectified Current See Fig. 1 Per Leg | $I_{(AV)}$ | 8 4 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 150 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at (Note 1) $I_F=4A, T_c=25^\circ C$ | V_F | 0.55 | | | 0.70 | | 0.80 | | V |
| Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage @ $T_c=25^\circ C$ @ $T_c=125^\circ C$ | I_R | 5.0 50 | | | | | | | mA mA |
| Typical Thermal Resistance Per Leg (Note2) | $R_{\theta JC}$ | 6.0 | | | | | | | $^\circ C/W$ |
| Operating Junction Temperature Range | T_J | -65 to +150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -65 to +150 | | | | | | | $^\circ C$ |

Notes: 1. Pulse Test: 300us Pulse Width, 1% Duty Cycle

2. Thermal Resistance from Junction to Case Per Leg.

RATINGS AND CHARACTERISTIC CURVES (MBRF830CT THRU MBRF8100CT)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

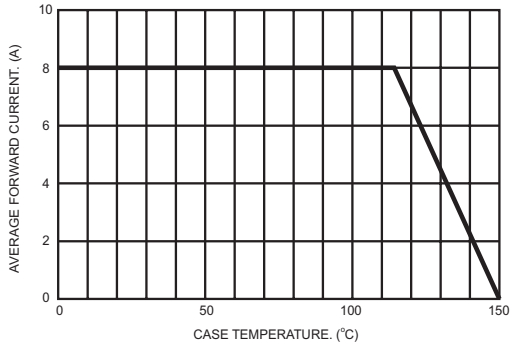


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

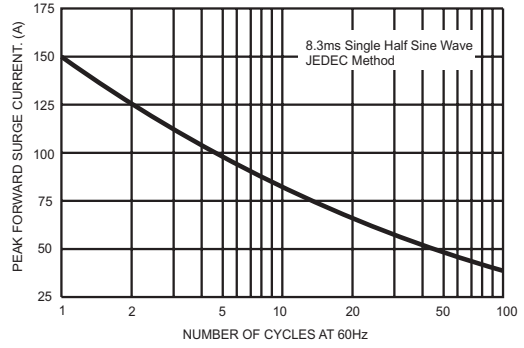


FIG.3- TYPICAL REVERSE CHARACTERISTICS

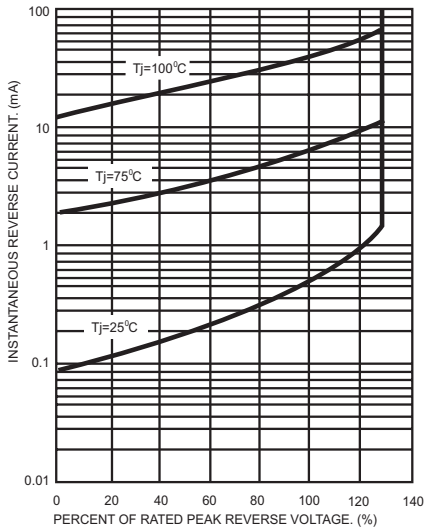


FIG.4- TYPICAL FORWARD CHARACTERISTICS

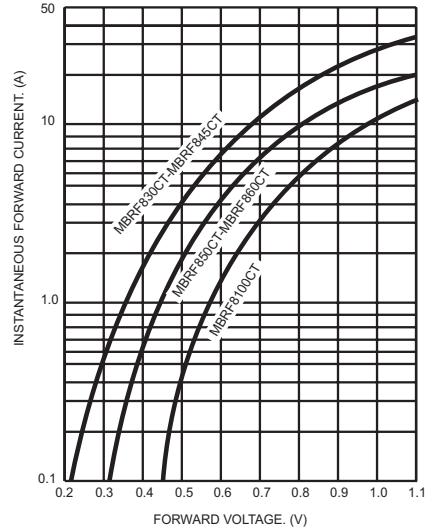
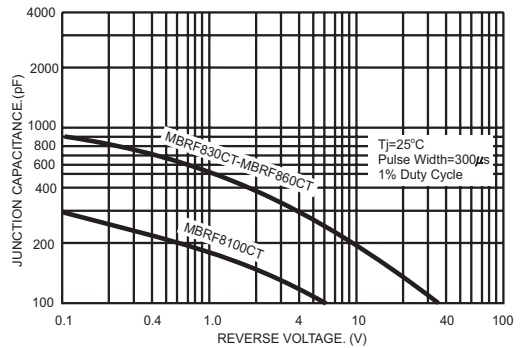


FIG.5- TYPICAL JUNCTION CAPACITANCE



All Datasheets cannot be modified without permission.

This datasheet has been download from :

www.AllDataSheet.com

100% Free DataSheet Search Site.

Free Download.

No Register.

Fast Search System.

www.AllDataSheet.com