



Low VF Schottky Barrier Rectifiers
Reverse Voltage - 200 Volts
Forward Current - 60 Amperes

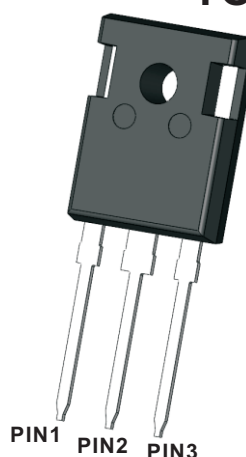
TO-247-3L

Features

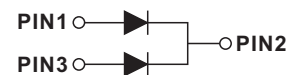
- High current capability
- High surge capability
- Super Low Forward Voltage Drop
- Reliable High Temperature Operation
- Softest, fast switching capability
- Lead Free Finish, RoHS Compliant

Mechanical data

- Case: TO-247-3L
- Approx Weight: 6.3g (0.22oz)
- Case Material: “Green” molding compound, UL flammability classification 94V-0, “Halogen-free”.



RoHS
COMPLIANT



Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

| Characteristics | Symbols | MBR60200WD | Units |
|--|------------------------------------|------------|-------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 200 | V |
| Maximum RMS voltage | V_{RMS} | 200 | V |
| Maximum DC Blocking Voltage | V_{DC} | 200 | V |
| Maximum Average Forward Rectified Current Per leg Per device | $I_{F(AV)}$ | 30 60 | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)(Per leg) | I_{FSM} | 450 | A |
| Typical Junction Capacitance ⁽¹⁾ | C_j | 335 | pF |
| Typical Thermal Resistance ⁽²⁾ | $R_{\theta JC}$ $R_{\theta JA}$ | 2 50 | °C/W |
| Operating Junction Temperature Range | T_j | -55 ~ +150 | °C |
| Storage Temperature Range | T_{stg} | -55 ~ +150 | °C |

| Parameter | Symbols | Test Conditions | Min | Typ | Max | Units |
|---------------------------------------|---------|----------------------------|-----|------|------|-------|
| Instantaneous Forward Voltage per leg | V_F | $I_F=30A, T_J=25^\circ C$ | | 0.84 | 0.90 | V |
| Reverse Current per leg | I_R | $V_R=200V, T_J=25^\circ C$ | | | 0.02 | mA |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 10cmX10cmX1mm copper pad areas.



Fig.1 Typical Forward Current Derating Curve

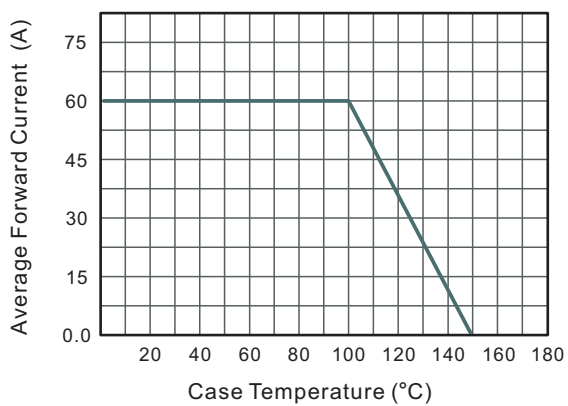


Fig.2 Typical Reverse Characteristics

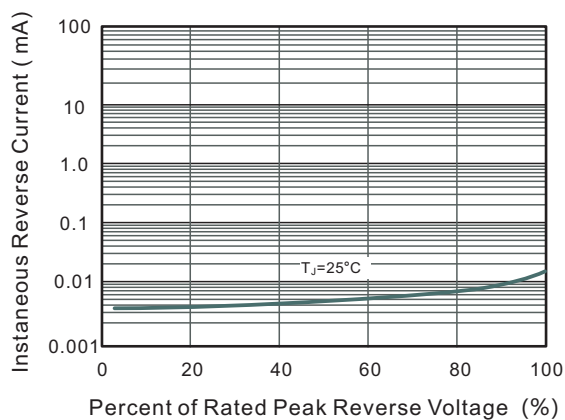


Fig.3 Typical Forward Characteristic(per leg)

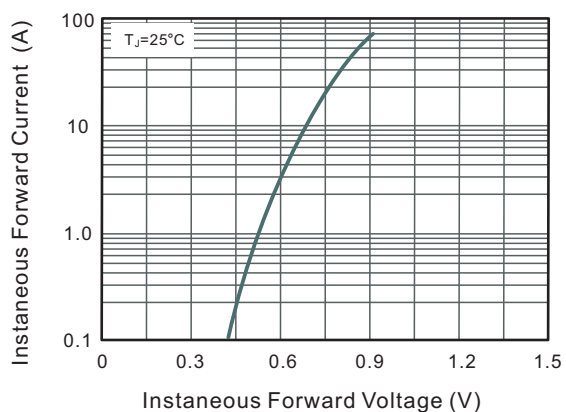
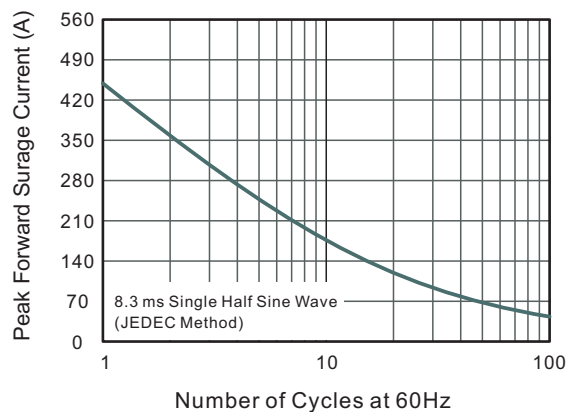


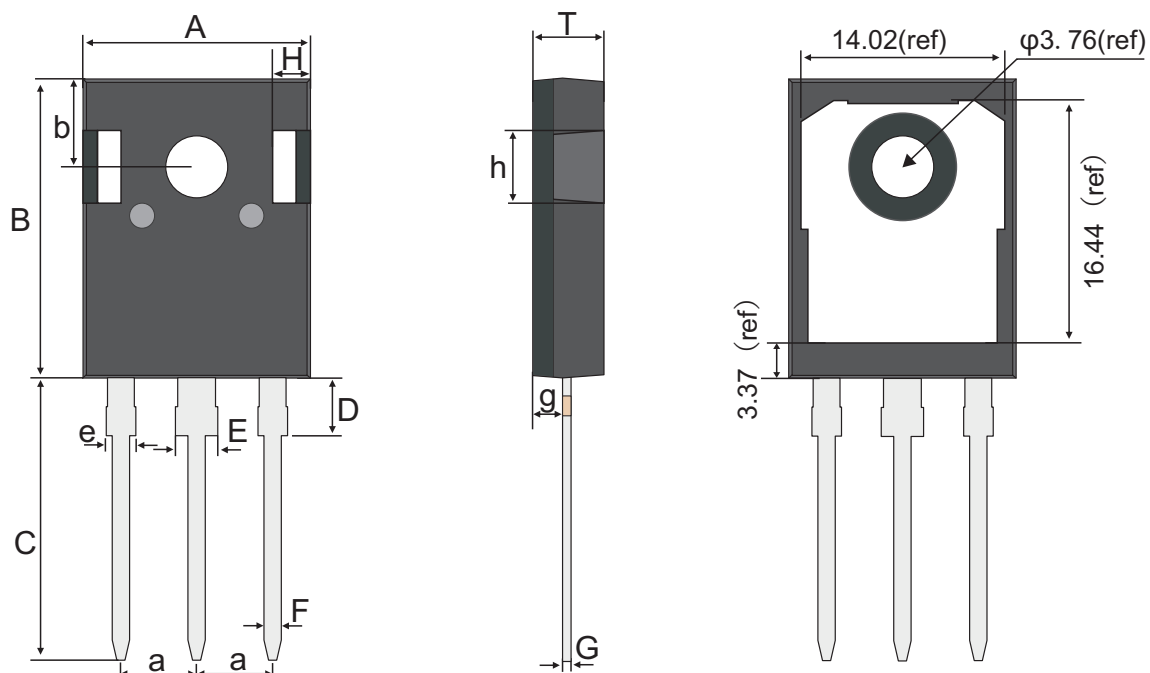
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current





Package Outline
Through Hole Package ; 3 leads

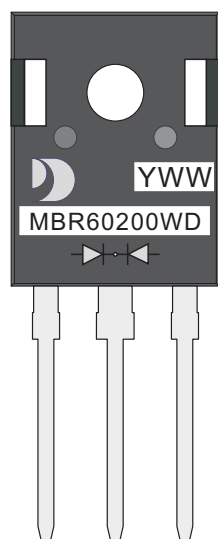
TO-247-3L



TO-247-3L mechanical data

| UNIT | | A | a | B | b | C | D | E | e | F | G | g | H | h | T |
|------|-----|-------|------|-------|------|------|------|------|------|-----|-----|------|------|------|-----|
| mm | max | 16.01 | 5.54 | 21.18 | 6.26 | 20.2 | 4.25 | 3.25 | 2.2 | 1.3 | 0.7 | 2.49 | 2.71 | 5.37 | 5.2 |
| | typ | 15.81 | 5.44 | 20.98 | 6.16 | 20.0 | 4.15 | 3.10 | 2.05 | 1.2 | 0.6 | 2.39 | 2.51 | 5.17 | 5.0 |
| | min | 15.61 | 5.34 | 20.78 | 6.06 | 19.8 | 4.05 | 2.95 | 1.9 | 1.1 | 0.5 | 2.29 | 2.31 | 4.97 | 4.8 |
| mil | max | 630 | 218 | 834 | 246 | 795 | 167 | 128 | 87 | 51 | 28 | 98 | 107 | 211 | 205 |
| | typ | 622 | 214 | 826 | 243 | 787 | 163 | 122 | 81 | 47 | 24 | 94 | 99 | 204 | 197 |
| | min | 615 | 210 | 818 | 239 | 780 | 159 | 116 | 75 | 43 | 20 | 90 | 91 | 196 | 189 |

Marking Diagram



YWW: Date Code
Y: Years(0~9)
WW: Week
MBR60200WD: Product name
(NOTE: The weekly code is based on the actual number of weeks in the calendar year.)



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