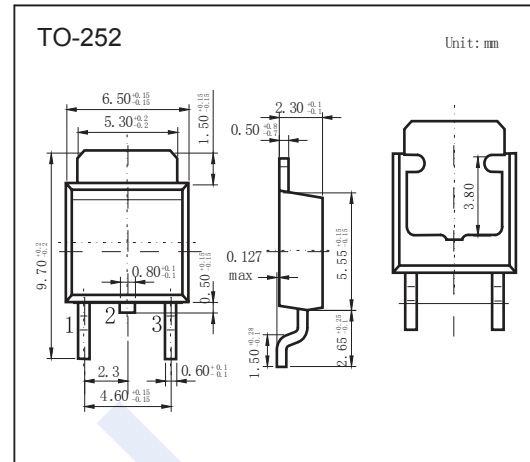
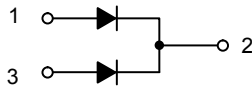


Schottky Diodes

MBRD1035C (KBRD1035C)

■ Features

- Highly Stable Oxide Passivated Junction
- High dv/dt Capability
- Very Low Forward Voltage Drop
- Epoxy Meets UL 94 V-0 @ 0.125 in

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|--|-----------------|------------|---------------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 35 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Average Rectified Forward Current - Per Leg | I_o | 5 | A |
| $T_c = 115^\circ\text{C}$ - Per Package | | 10 | |
| Non-Repetitive Peak Surge Current @ 60Hz | I_{FSM} | 50 | |
| Peak Repetitive Forward Current @ 20KHz, $T_c = 115^\circ\text{C}$ | I_{FRM} | 10 | |
| Voltage Rate of Change (Rated V_R , $T_J = 25^\circ\text{C}$) | dv/dt | 10000 | V/us |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 137 | $^\circ\text{C}/\text{W}$ |
| Thermal Resistance Junction to Case | $R_{\theta JC}$ | 3 | $^\circ\text{C}/\text{W}$ |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature range | T_{stg} | -55 to 150 | |

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--|--------|--|-----|-----|------|------|
| Reverse breakdown voltage | V_R | $I_R = 100 \mu\text{A}$ | 35 | | | V |
| Forward voltage (Note.1) | V_F | $I_F = 5 \text{ A}$, $T_J = 25^\circ\text{C}$ | | | 0.47 | |
| | | $I_F = 5 \text{ A}$, $T_J = 100^\circ\text{C}$ | | | 0.41 | |
| | | $I_F = 10 \text{ A}$, $T_J = 25^\circ\text{C}$ | | | 0.56 | |
| | | $I_F = 10 \text{ A}$, $T_J = 100^\circ\text{C}$ | | | 0.55 | |
| Reverse voltage leakage current (Note.1) | I_R | $V_R = 35 \text{ V}$, $T_J = 25^\circ\text{C}$ | | | 2 | mA |
| | | $V_R = 35 \text{ V}$, $T_J = 100^\circ\text{C}$ | | | 30 | |
| | | $V_R = 17.5 \text{ V}$, $T_J = 25^\circ\text{C}$ | | | 0.2 | |
| | | $V_R = 17.5 \text{ V}$, $T_J = 100^\circ\text{C}$ | | | 5 | |

Note.1: Pulse Test: Pulse Width $\leq 250 \mu\text{s}$, Duty Cycle $\leq 2.0\%$

■ Marking

| | |
|---------|-------|
| Marking | B10 |
| | 35C** |

Schottky Diodes

MBRD1035C (KBRD1035C)

■ Typical Characteristics

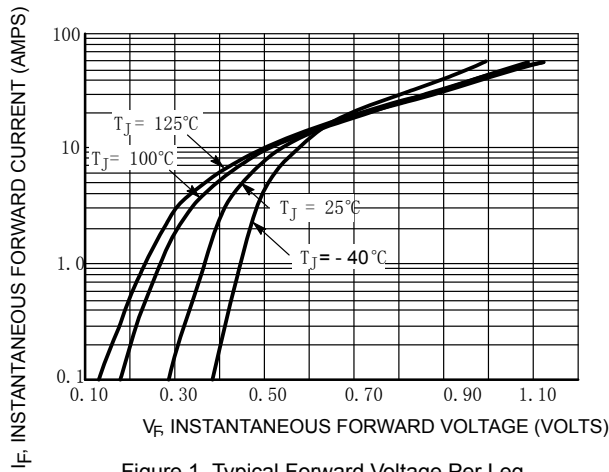


Figure 1. Typical Forward Voltage Per Leg

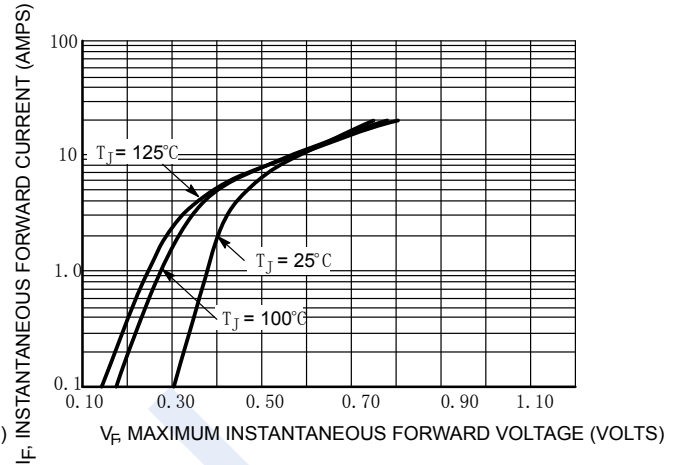


Figure 2. Maximum Forward Voltage Per Leg

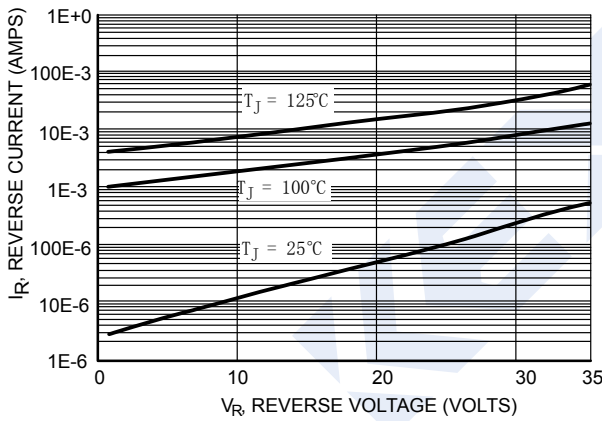


Figure 3. Typical Reverse Current Per Leg

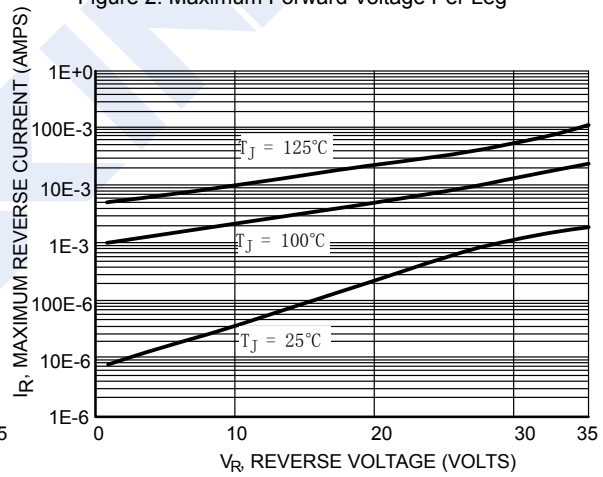


Figure 4. Maximum Reverse Current Per Leg

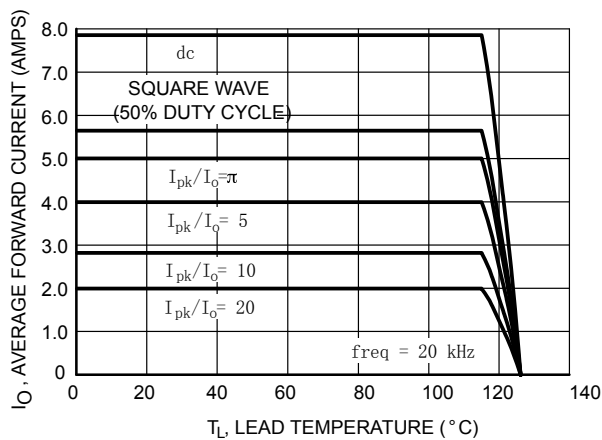


Figure 5. Current Derating Per Leg

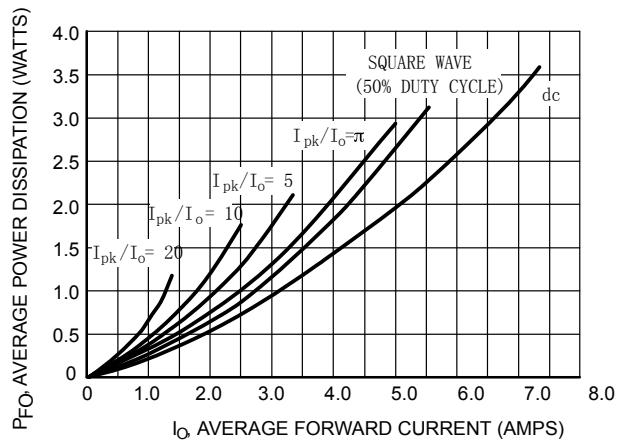


Figure 6. Forward Power Dissipation Per Leg

Schottky Diodes

MBRD1035C (KBRD1035C)

■ Typical Characteristics

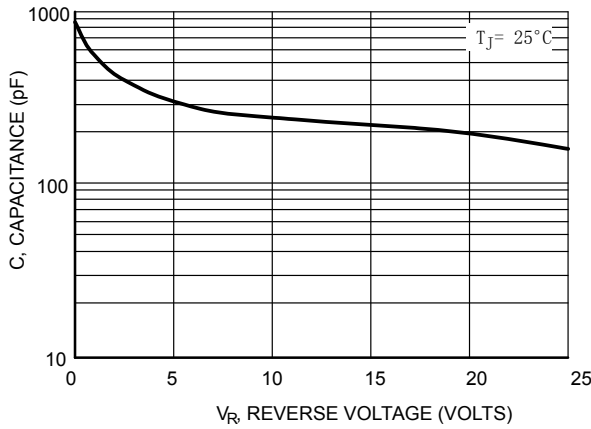


Figure 7. Capacitance Per Leg

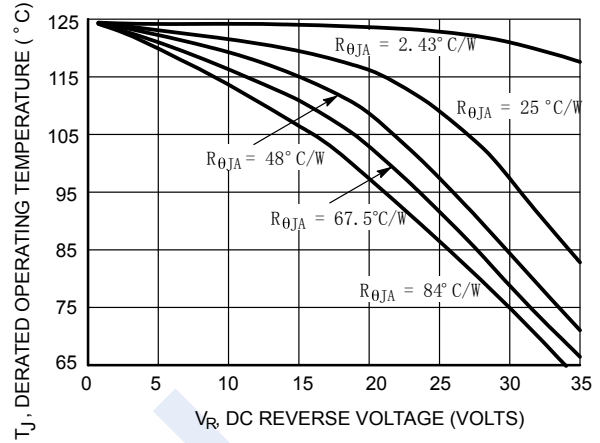


Figure 8. Typical Operating Temperature Derating Per Leg

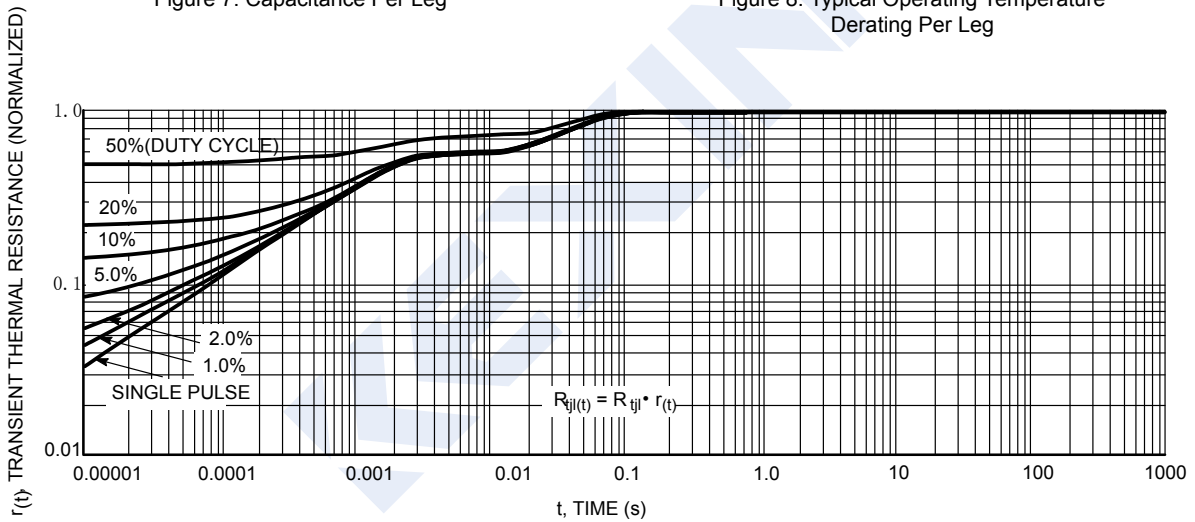


Figure 9. Thermal Response Junction to Case (Per Leg)

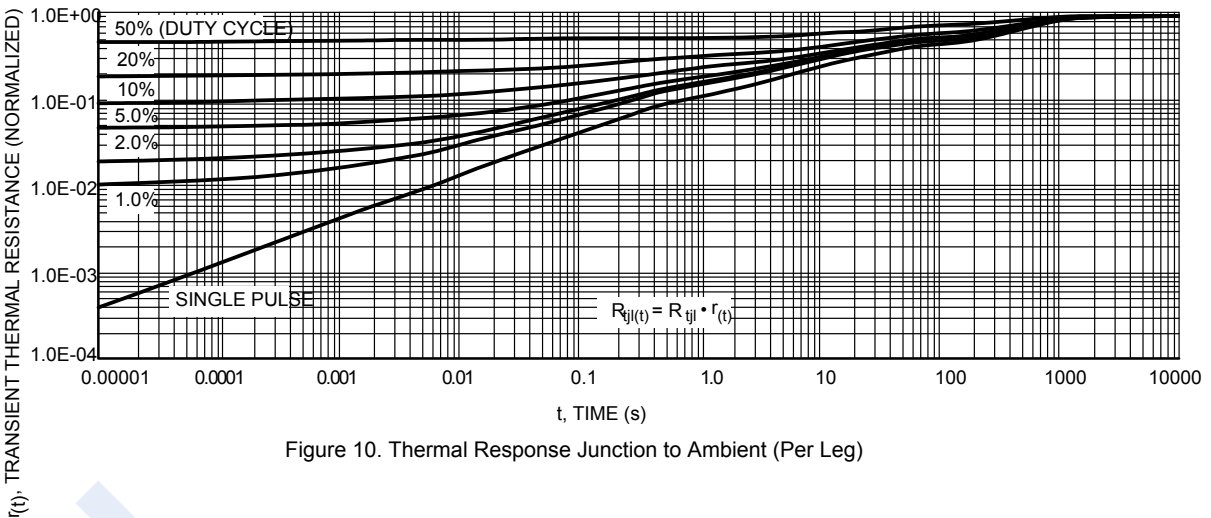


Figure 10. Thermal Response Junction to Ambient (Per Leg)