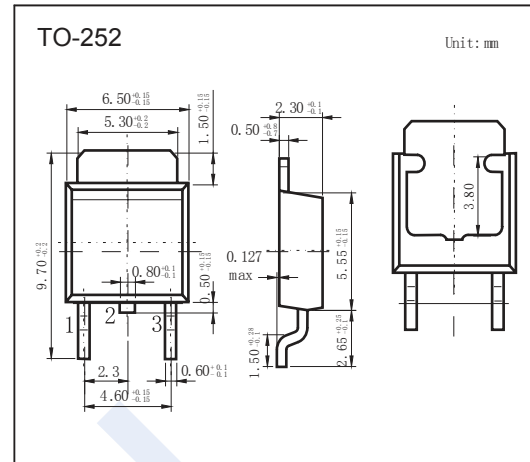
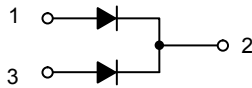


## Schottky Diodes

## 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 $T_c = 115^\circ\text{C}$	$I_o$	5	A
- 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

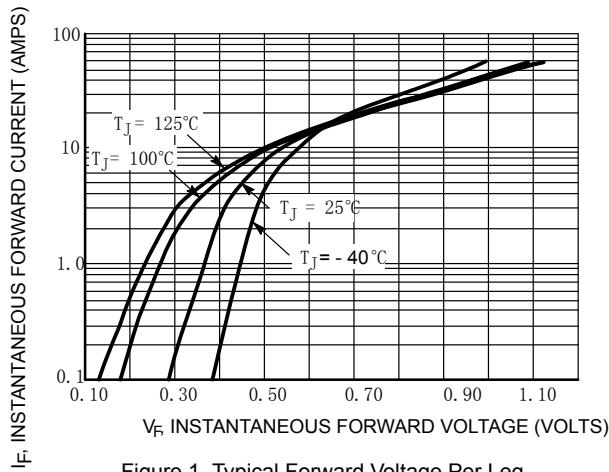


Figure 1. Typical Forward Voltage Per Leg

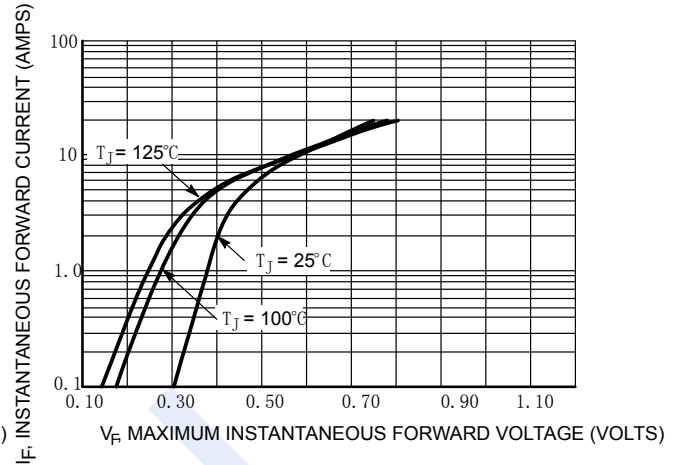


Figure 2. Maximum Forward Voltage Per Leg

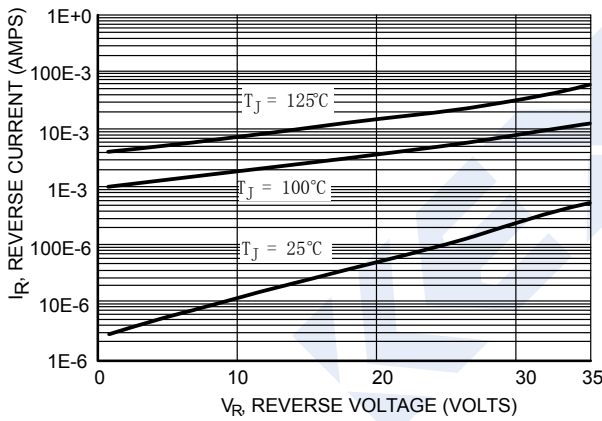


Figure 3. Typical Reverse Current Per Leg

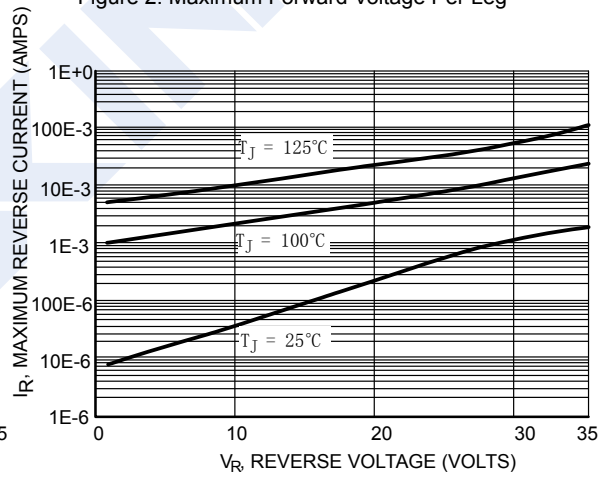


Figure 4. Maximum Reverse Current Per Leg

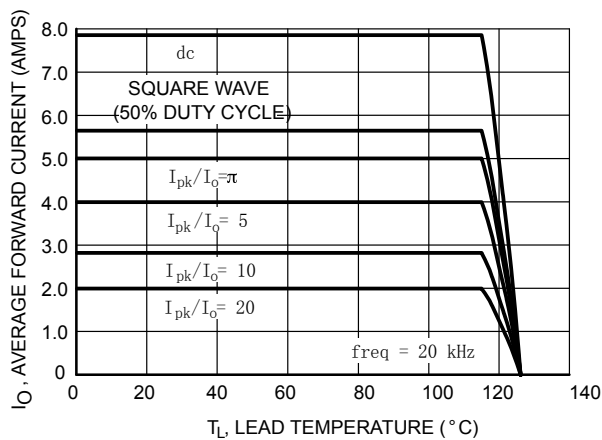


Figure 5. Current Derating Per Leg

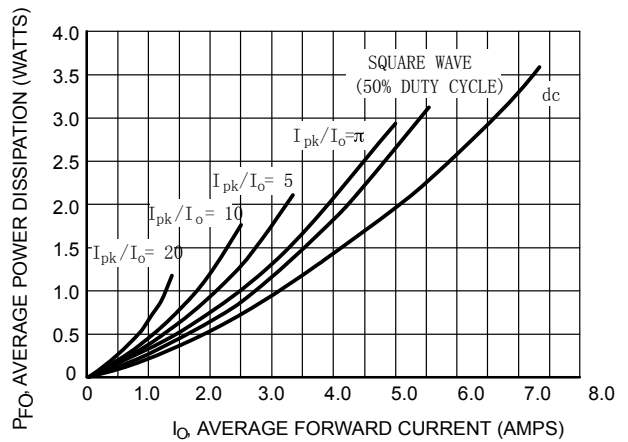


Figure 6. Forward Power Dissipation Per Leg

## Schottky Diodes

### MBRD1035C (KBRD1035C)

■ Typical Characteristics

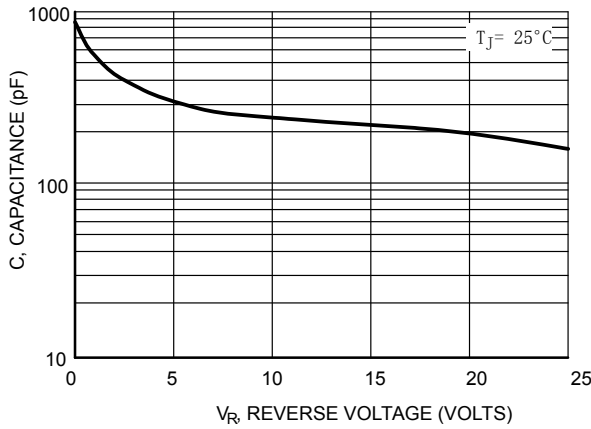


Figure 7. Capacitance Per Leg

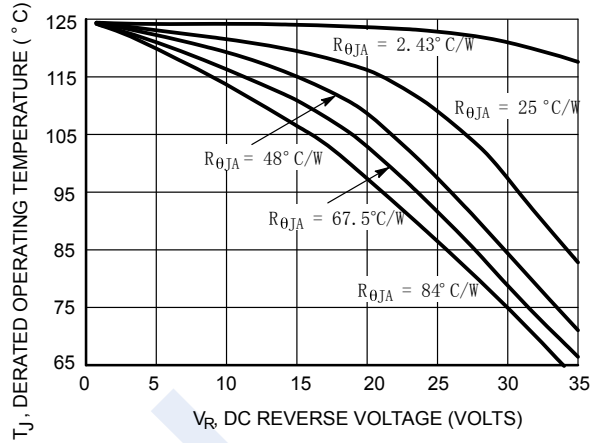


Figure 8. Typical Operating Temperature Derating Per Leg

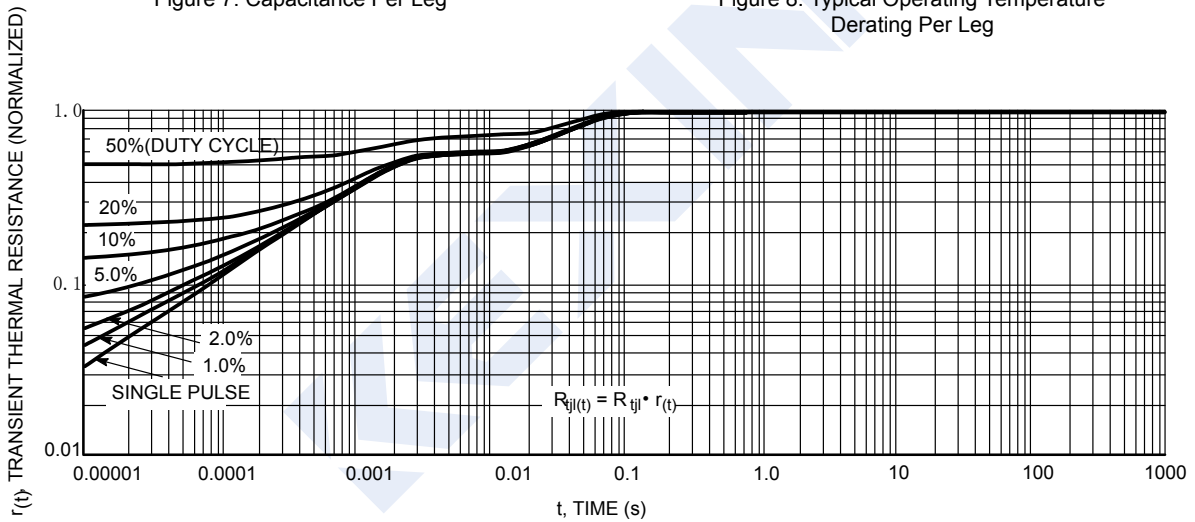


Figure 9. Thermal Response Junction to Case (Per Leg)

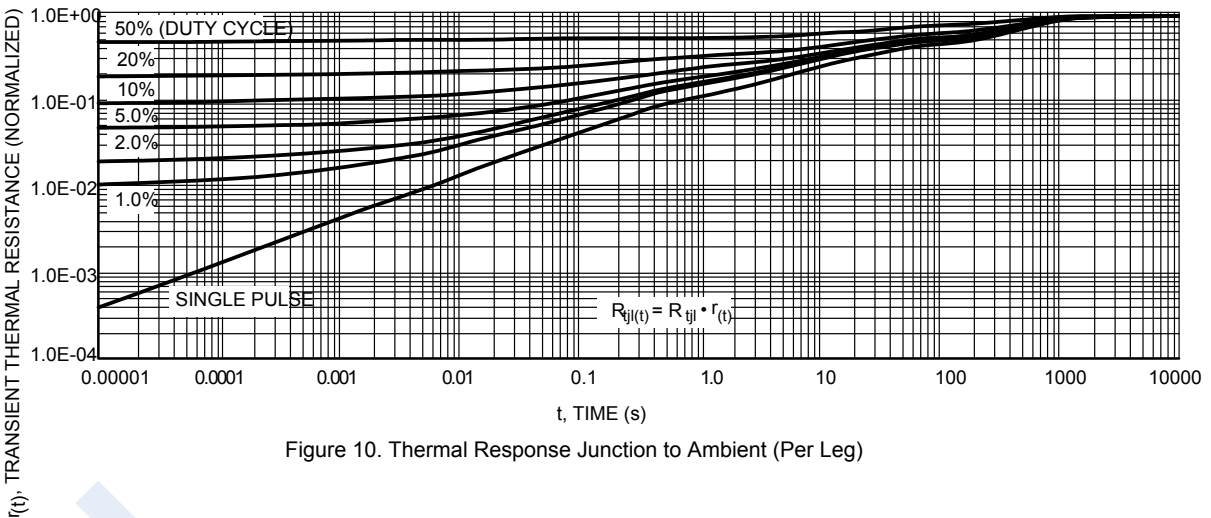


Figure 10. Thermal Response Junction to Ambient (Per Leg)