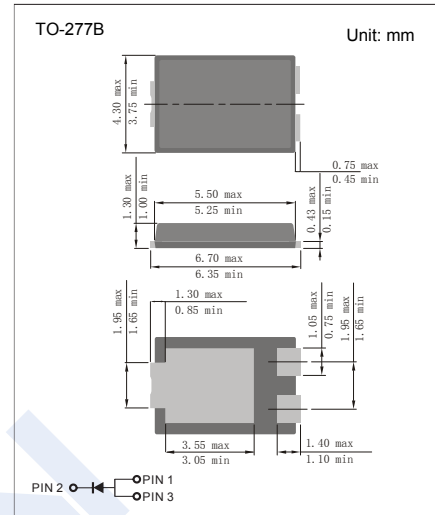


Schottky Barrier Diodes

KBR10U100SP5

■ Features

- Low Forward Voltage Drop
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability

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

Parameter	Symbol	Rating	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_{DC}		
Average Rectified Output Current	I_o	5	A
Per Leg		10	
Total			
Peak Forward Surge Current $T_a=25^\circ\text{C}$	I_{FSM}	150	
Typical Thermal Resistance	$R_{\theta JC}$	3	$^\circ\text{C}/\text{W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	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	$I_R = 0.1\text{mA}$	100			V
Forward voltage	V_F	$I_F = 5\text{A}, T_J = 25^\circ\text{C}$			0.67	
		$I_F = 5\text{A}, T_J = 125^\circ\text{C}$		0.53	0.56	
		$I_F = 10\text{A}, T_J = 25^\circ\text{C}$			0.82	
Reverse voltage leakage current	I_R	$V_F = 100\text{V}, T_J = 25^\circ\text{C}$			0.2	mA
		$V_F = 100\text{V}, T_J = 125^\circ\text{C}$			25	

Schottky Barrier Diodes

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Typical Characteristics

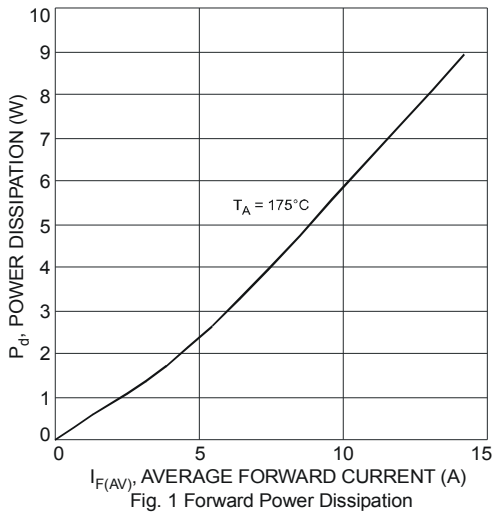


Fig. 1 Forward Power Dissipation

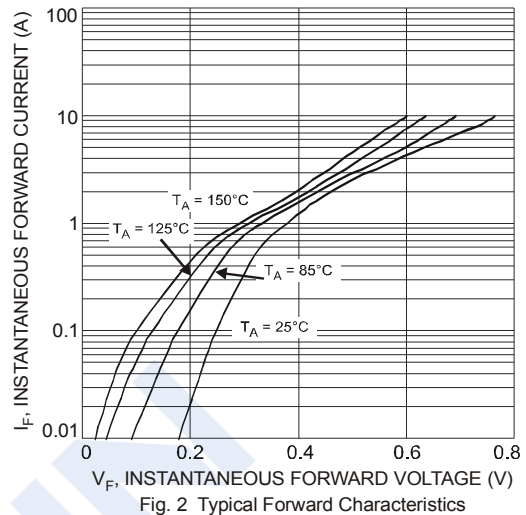


Fig. 2 Typical Forward Characteristics

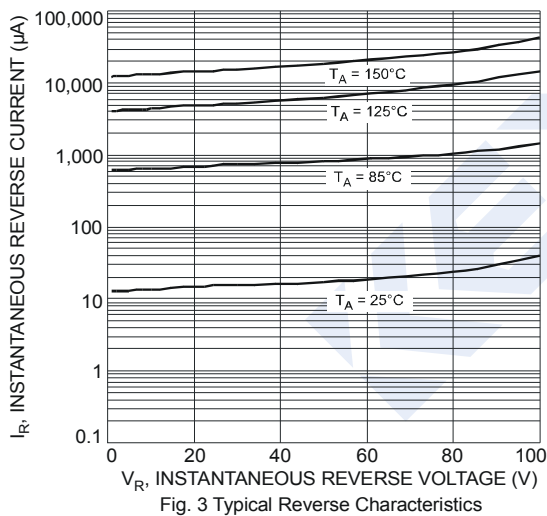


Fig. 3 Typical Reverse Characteristics

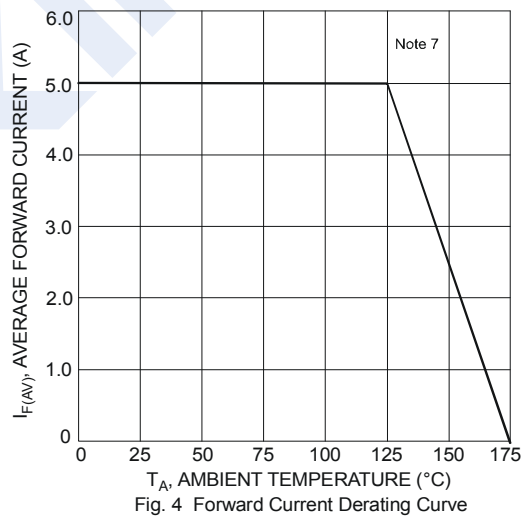


Fig. 4 Forward Current Derating Curve

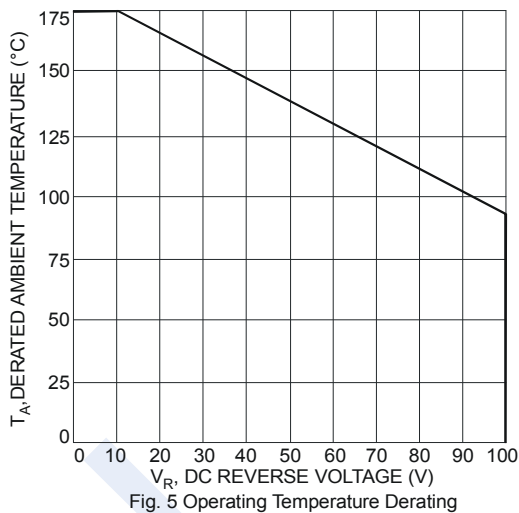


Fig. 5 Operating Temperature Derating