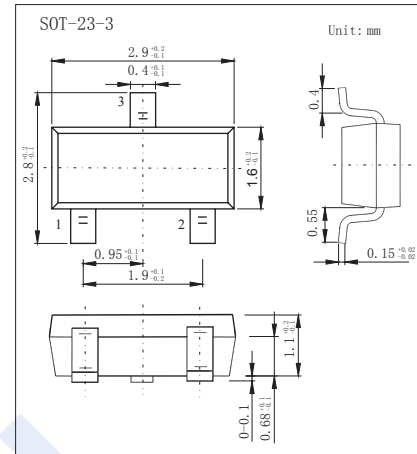
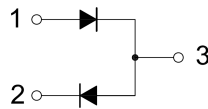


## Switching Diodes

### MMBD7000 (KMBD7000)

#### ■ Features

- Dual Switching Diode
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications



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

Parameter	Symbol	Rating	Unit
Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	
Working Peak Reverse Voltage	$V_{RWM}$		
RMS Reverse Voltage	$V_{RMS}$	53	
Average Rectified Output Current	$I_o$	200	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1\mu\text{s}$ @ $t = 1\text{s}$	$I_{FSM}$	2	A
		1	
Power Dissipation	$P_d$	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	$^\circ\text{C}/\text{W}$
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	$V_R$	$I_R = 100\ \mu\text{A}$	100			V
Forward voltage	$V_F$	$I_F = 1\ \text{mA}$			0.7	
		$I_F = 10\ \text{mA}$			0.82	
		$I_F = 100\ \text{mA}$			1.1	
Reverse voltage leakage current	$I_R$	$V_R = 50\ \text{V}$			1	$\mu\text{A}$
		$V_R = 100\ \text{V}$			3	
Diode capacitance	$C_T$	$V_R = 0\ \text{V}, f = 1\ \text{MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10\ \text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\ \Omega$			4	ns

#### ■ Marking

Marking	5C
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## Switching Diodes

### MMBD7000 (KMBD7000)

#### ■ Typical Characteristics

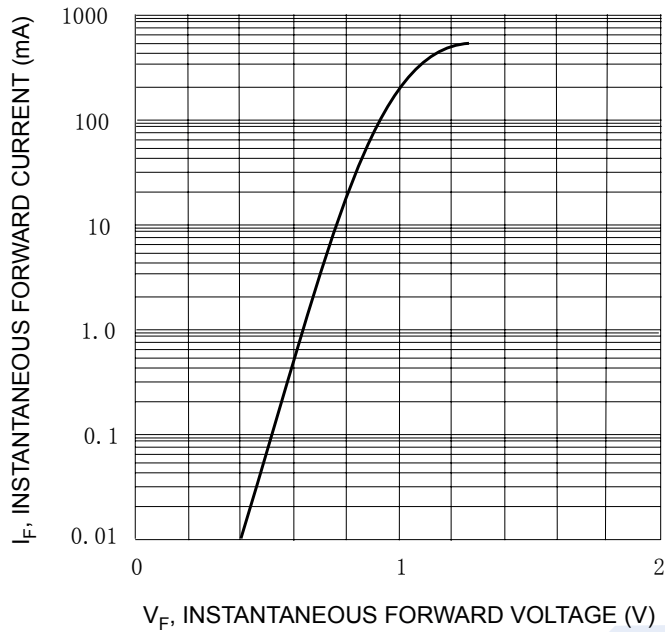


Fig. 1 Forward Characteristics

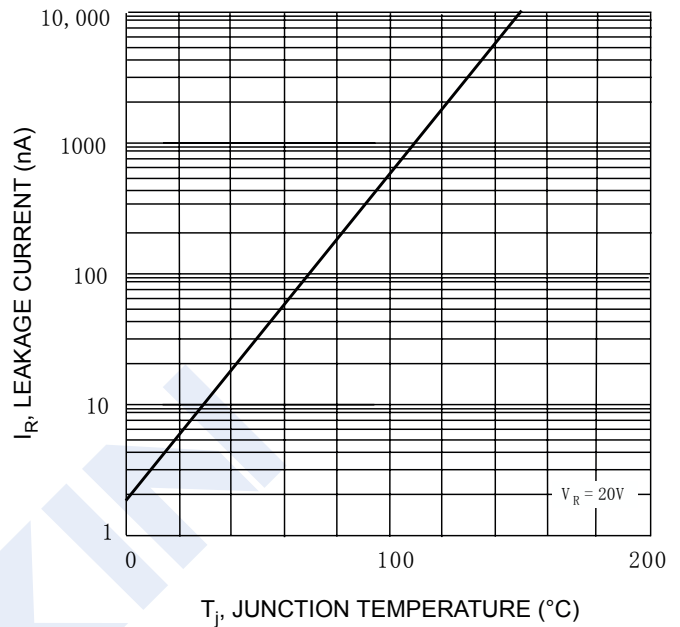


Fig. 2 Leakage Current vs Junction Temperature