MMBD7000

Dual Surface Mount Switching Diode

Voltage Range
75 Volts
350m Watts Power Dissipation

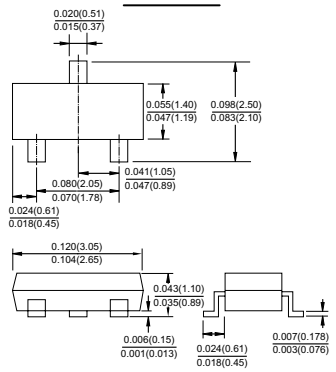
Features

- ✧ Fast switching speed
- ✧ Surface mount package ideally suited for automatic insertion
- ✧ For general purpose switching applications
- ✧ High conductance

Mechanical Data

- ✧ Case: SOT-23, Molded plastic
- ✧ Terminals: Solderable per MIIL-STD-202, Method 208
- ✧ Polarity: See diagram
- ✧ Marking: KJH
- ✧ Weight: 0.008 gram (approx.)

SOT-23



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	MMBD7000	Units
Non-Repetitive Peak Reverse Voltage	VRM	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	75	V
RMS Reverse Voltage	VR(RMS)	53	V
Forward Continuous Current (Note 1)	IFM	300	mA
Average Rectifier Output Current (Note 1)	Io	150	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0uS @ t=1.0S	IFSM	 2.0 1.0	A
Power Dissipation (Note 1)	Pd	350	mW
Thermal Resistance Junction to Ambient Air (Note 1)	RθJA	357	K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 150	^{O}C

Electrical Characteristics

Type Number		Symbol	Min	Max	Units
Reverse Breakdown Voltage (Note 3) IR=100uA		V(BR)	75	-	V
Forward Voltage	IF=1.0mA IF= 10mA IF = 50mA IF=150mA	VF	0.55 0.67 0.75 -	0.70 0.82 1.10 1.25	V
Peak Reverse Current	 VR=50V VR=100V VR=50V, TJ=125℃ VR=20V	IR	 - 	 1.0 3.0 100 25	 uA nA
Junction Capacitance	VR=0, f=1.0MHz	Cj	-	2.0	pF
Reverse Recovery Time (Note 2)		trr	-	4.0	nS

Notes: 1. Valid Provided that Terminals are Kept at Ambient Temperature.
2. Reverse Recovery Test Conditions: IF=IR=10mA, Irr=0.1 x IR, RL=100Ω.
3. Test Period < 3000uS.

RATINGS AND CHARACTERISTIC CURVES (MMBD7000)

FIG.1- FORWARD CHARACTERISTICS

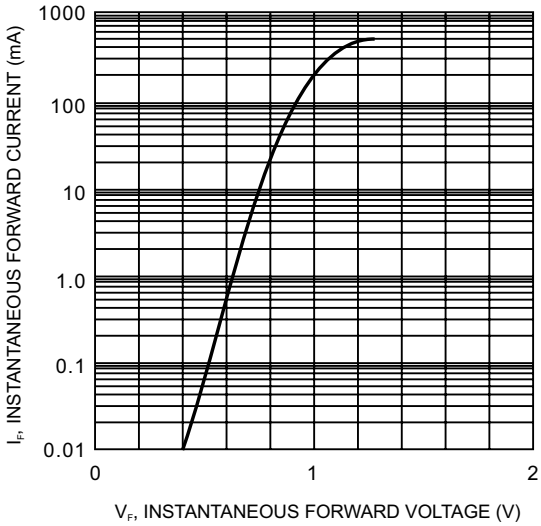
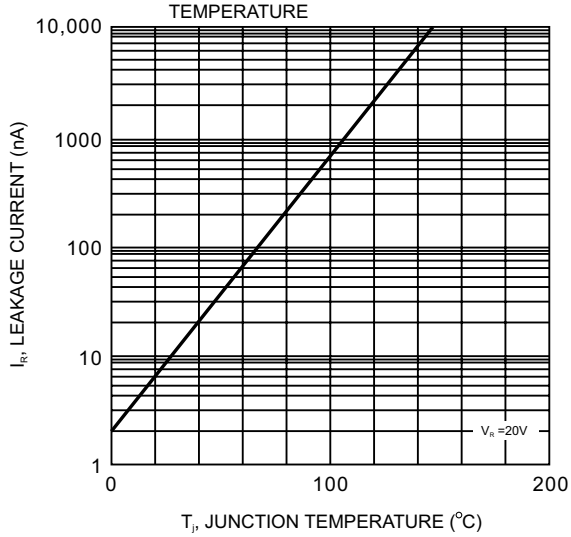


FIG.2- LEAKAGE CURRENT VS JUNCTION TEMPERATURE



littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.