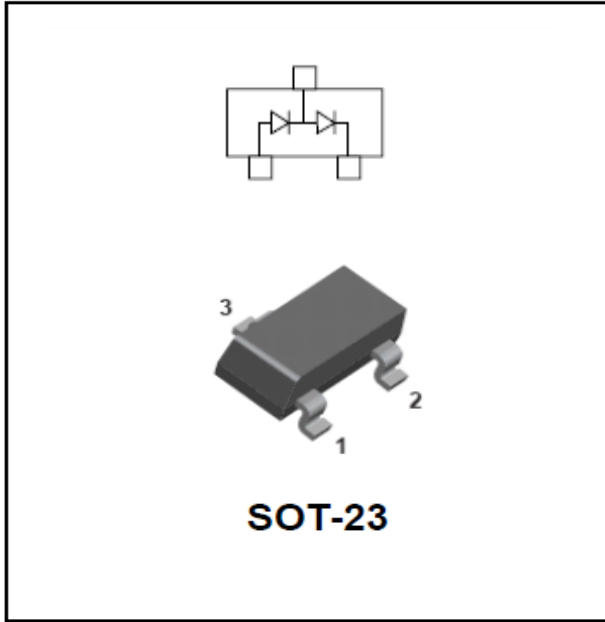


Dual Switching Diode



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Fast switching speed
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion

Mechanical Data

- **Package:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** M5C

■Maximum Ratings (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Value
Peak Reverse Voltage	V_{RRM}	V	100
Reverse Voltage	V_R	V	100
Forward Continuous Current@f>=50Hz, Per Leg	I_F	mA	200
Non-Repetitive Peak Forward Surge Current @tp=1us tp=1s	I_{FSM}	A	2 1
Power Dissipation	P_D	mW	225
Maximum Thermal Resistance	R_{thJA}	°C/W	556
Operating Junction Temperature	T_J	°C	-55 to +150
Storage Temperature	T_{STG}	°C	-55 to +150

■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMBD7000	F2	Approximate 0.008	3000	30000	120000	7" reel

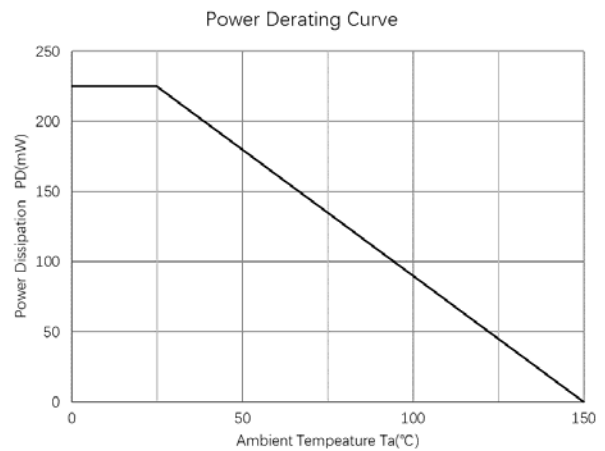
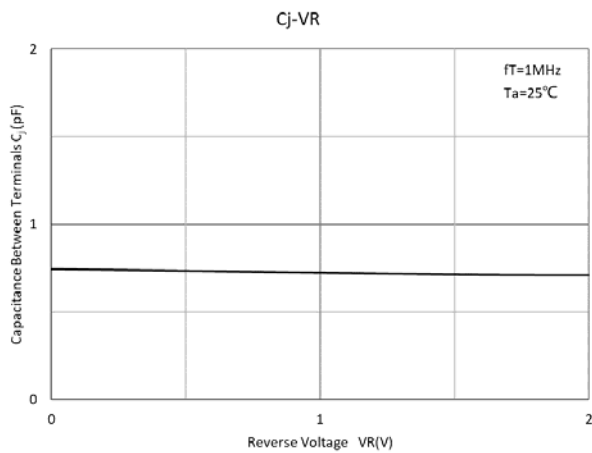
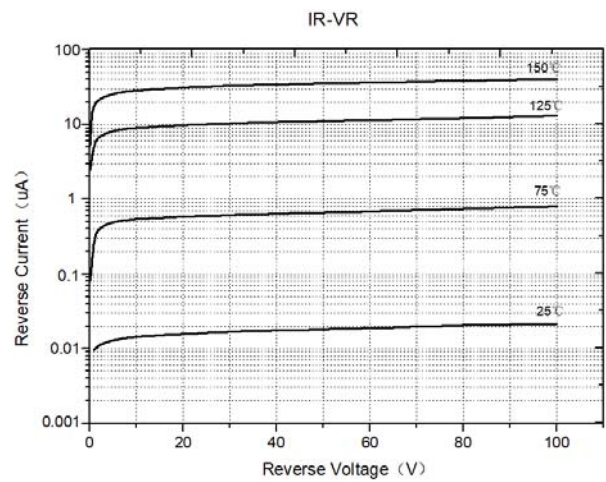
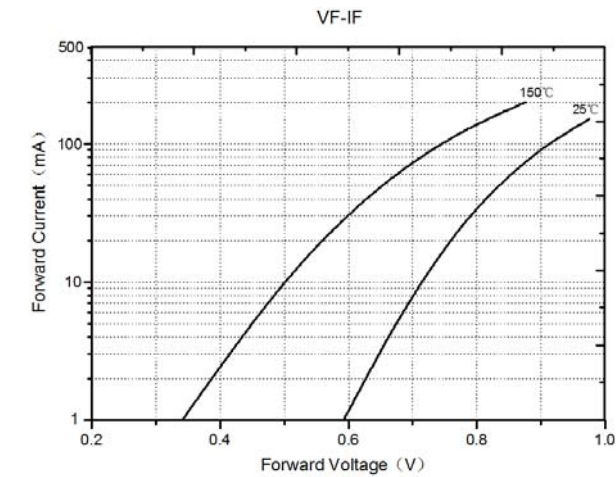


MMBD7000

■ Electrical Characteristics (Ta=25°C Unless otherwise specified, Per Leg)

Item	Symbol	Unit	Conditions	Min	Max
Reverse Voltage	V_R	V	$I_R=100\mu A$	100	
Forward Voltage	V_F	V	$I_F=1mA$	0.55	0.7
			$I_F=10mA$	0.67	0.82
			$I_F=100mA$	0.75	1.1
Reverse Current	I_R	uA	$V_R=50V$		1
			$V_R=100V$		3
Typical Junction Capacitance	C_J	pF	$f=1.0MHz, V_R=0V$		2
Reverse Recovery Time	T_{rr}	ns	$I_F=10mA, V_R=6V, R_L=100\Omega, I_{rr}=1mA$		4

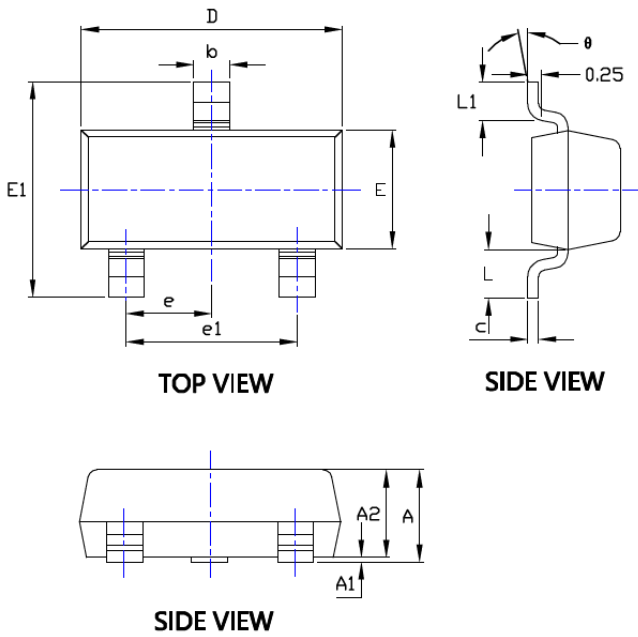
■ Typical Characteristics (Per Leg)





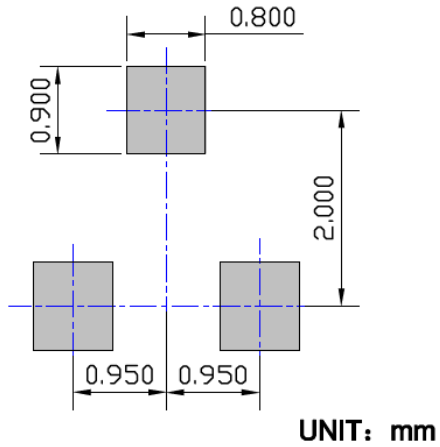
MMBD7000

■SOT-23 Package Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.200	0.300	0.500
θ	0°	8°	0°	8°

■SOT-23 Suggested Pad Layout





MMBD7000

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