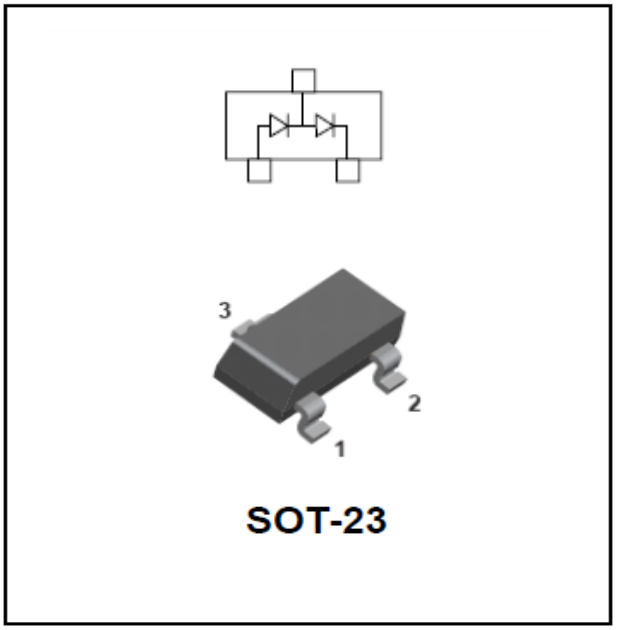
Dual Switching Diode



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisure 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℃ 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 Resisance	R_{thJA}	℃/W	556
Operating Junction Temperature	T_J	℃	-55 to +150
Storage Temperature	T_{STG}	℃	-55 to +150

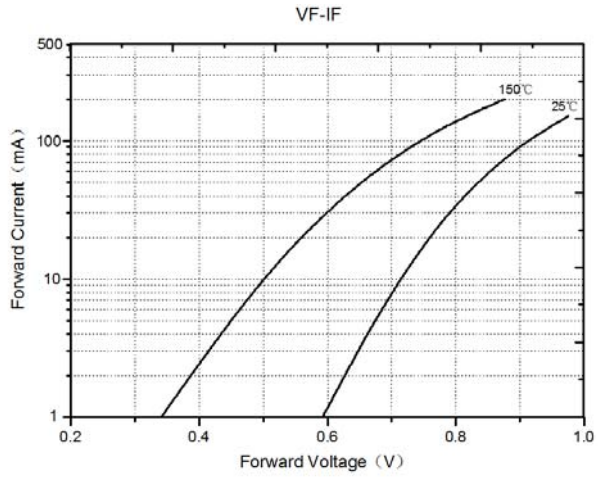
■Ordering Information (Example)

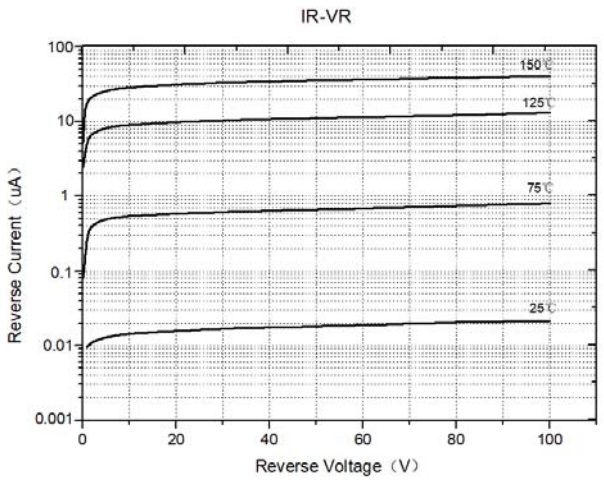
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMBD7000	F2	Approximate 0.008	3000	30000	120000	7” reel

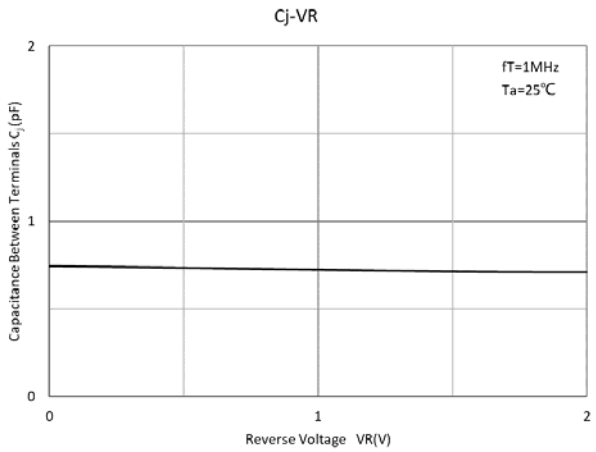
■Electrical Characteristics（Ta=25℃ Unless otherwise specified, Per Leg）

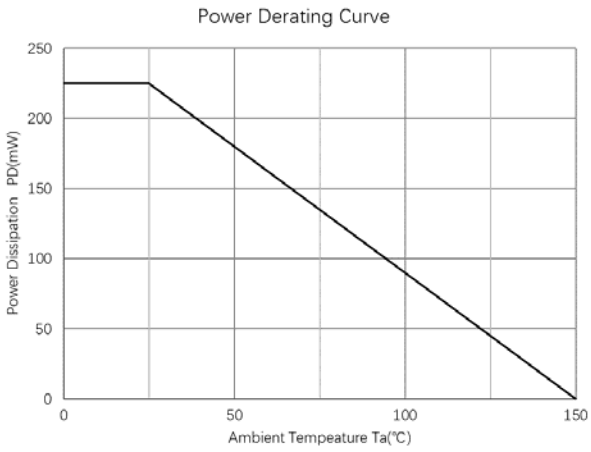
Item	Symbol	Unit	Conditions	Min	Max
Reverse Voltage	V_R	V	I_R=100uA	100	
Forward Voltage	V_F	V	I_F=1mA	0.55	0.7
			I_F=10mA	0.67	0.82
			I_F=100mA	0.75	1.1
Reverse Current	I_R	uA	V_R=50V		1
			V_R=100V		3
Typical Junction Capacitance	C_J	pF	f=1.0MHz, V_R=0V		2
Reverse Recovery Time	T_{rr}	ns	I_F=10mA,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

■ Typical Characteristics (Per Leg)

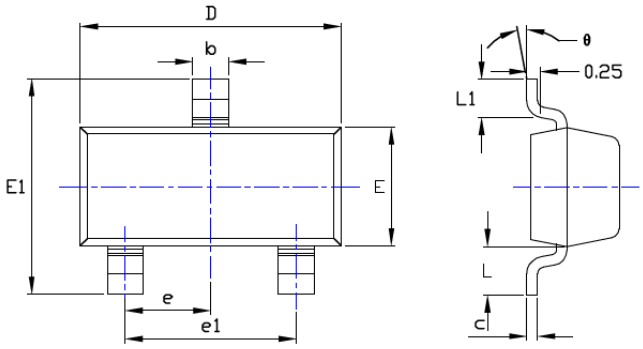


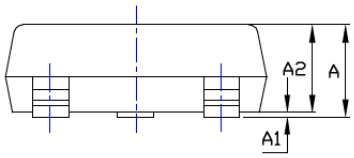






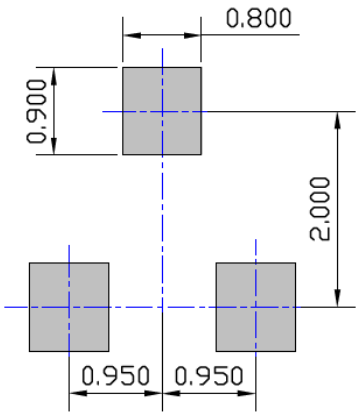
■SOT-23 Package Outline Dimensions





DIMENSIONS				
SYMBOL	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



UNIT：mm

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