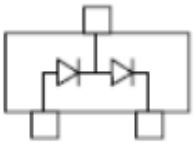
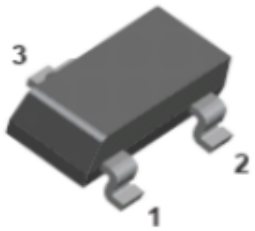
Dual Switching Diode





SOT-23

Features

- Moisture sensitivity level 1
- Reverse voltage: 300V
- Average forward current : 225mA

Application

- Signal switching
- High frequency rectifier

Mechanical data

- **Package**: SOT-23
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ **Maximum Ratings** (T_a=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			4P
Repetitive peak reverse voltage	V_{RRM}	V	350
Forward current	I_F	mA	225
Non-repetitive Surge peak forward current @ t=1us	I_{FSM}	A	4
Non-repetitive Surge peak forward current @ t=1s			1
Power dissipation	P_D	mW	350
Junction temperature	T_J	℃	-55 to +150
Storage temperature	T_{STG}	℃	-55 to +150

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

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	I_R=150uA	350		
Forward voltage	V_{F1}	V	I_F=20mA			0.87
	V_{F2}	V	I_F=100mA			1
	V_{F3}	V	I_F=200mA			1.25
Reverse leakage current	I_R	nA	V_R=240V			100
Junction capacitance	Cj	pF	V_R=0V,f=1MHz			5
Reverse recovery time	Trr	ns	I_F =30mA, I_R=30mA R_L=100Ω, Irr=3mA			50

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	℃/W	357
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	℃/W	286

Note:

（1）Device mounted on PCB, single-sided copper, with standard footprint

■Characteristics

Fig 1：P_D-Ta Curve

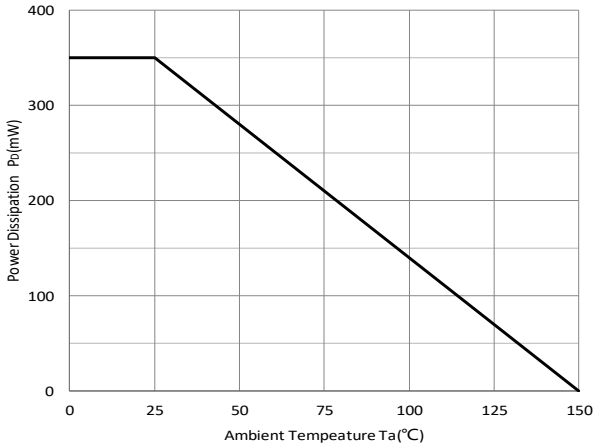


Fig 2：Capacitance Capability

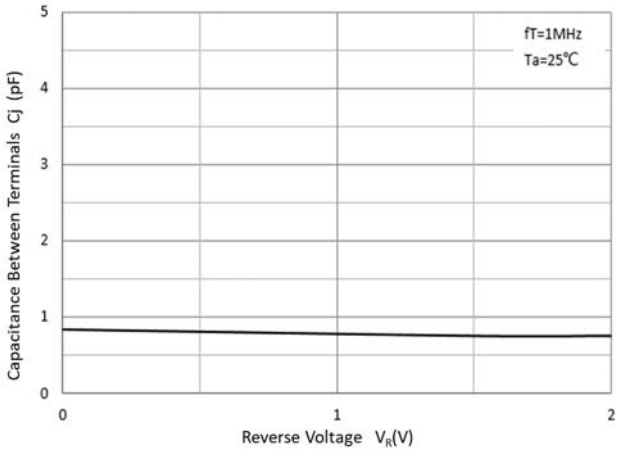


Fig 3：Typical Forward Characteristics

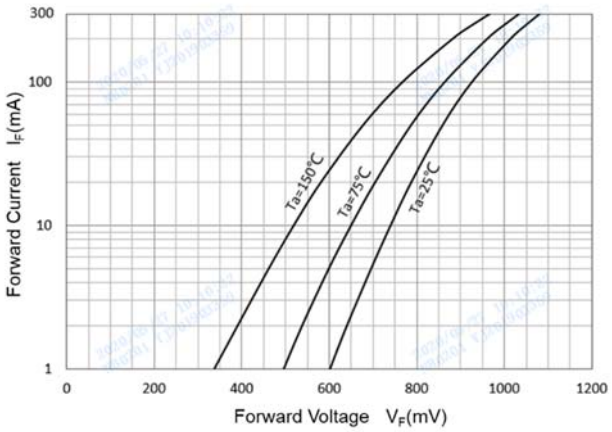
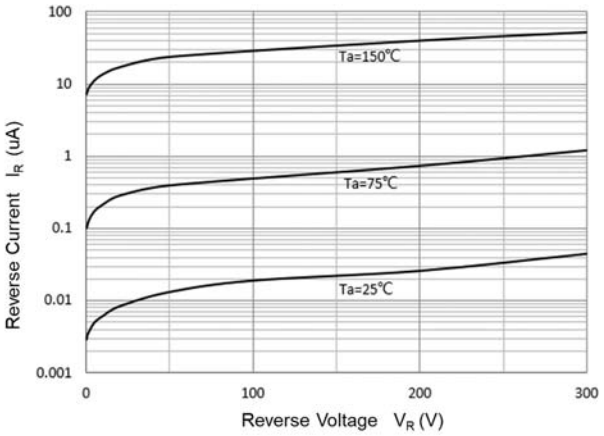


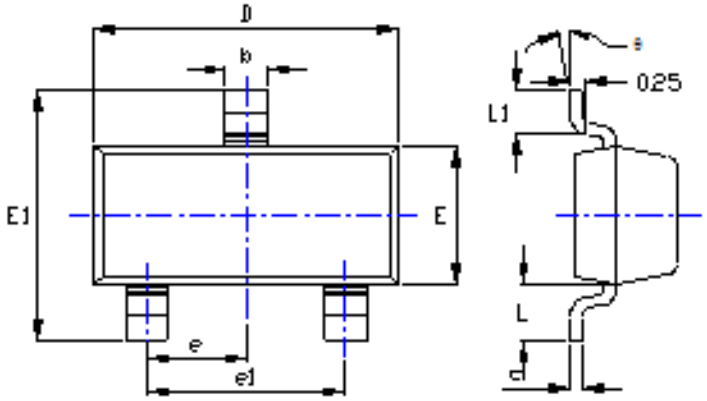
Fig 4：Typical Reverse Characteristics

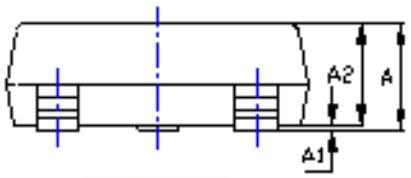


■Ordering Information

Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity (pcs)	Delivery mode
MMBD3004S	F2	Approximate 0.008	3000	30000	120000	7” reel
MMBD3004S	F4	Approximate 0.008	10000	/	210000	13” reel

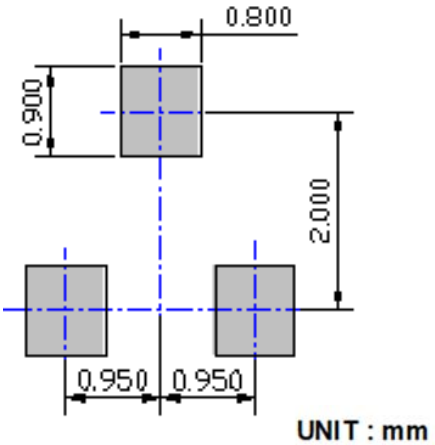
■ Outline Dimensions





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	0.020	0.300	0.500
θ	0°	8°	0°	8°

■ Suggested Pad Layout



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