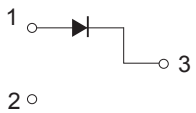
GOOD-ARK
SEMICONDUCTOR

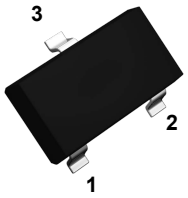
MMBD914
Switching Diode

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



Schematic Diagram



SOT-23

Absolute Maximum Ratings

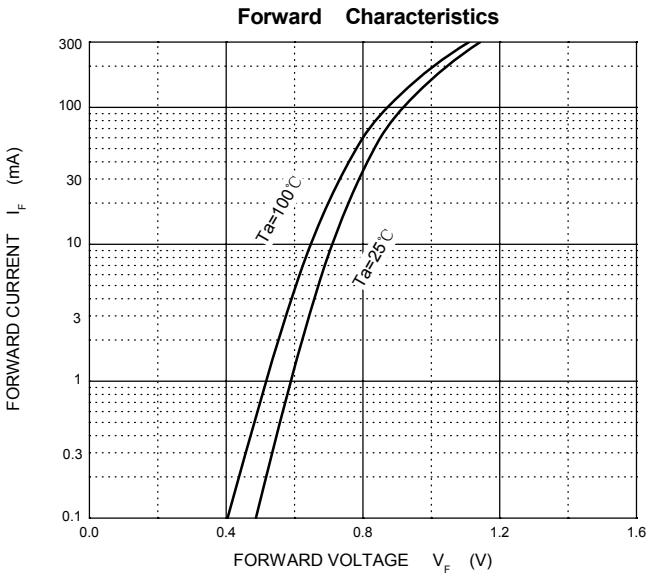
(T_A=25°C unless otherwise specified)

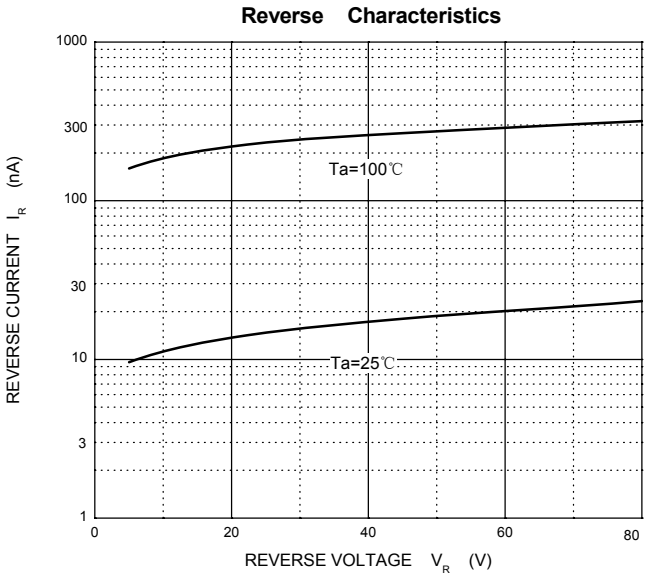
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	
Average Rectified Output Current	I_O	300	mA
Non-Repetitive Peak Forward Surge Current @8.3ms	I_{FSM}	2	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 to +150	℃

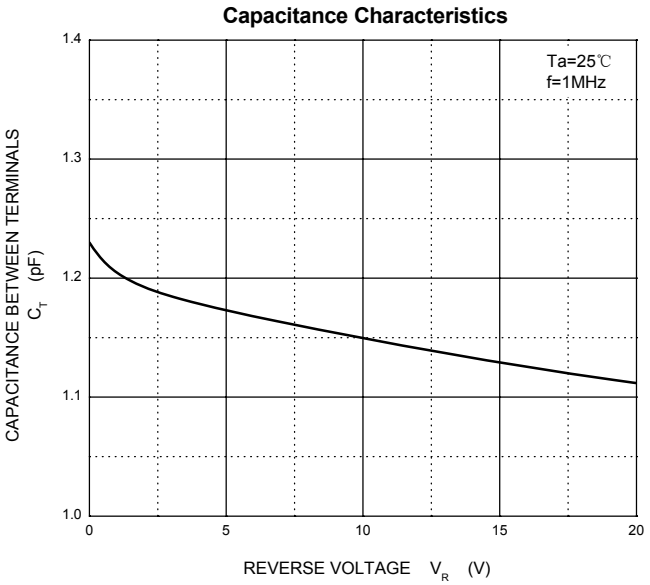
Electrical Characteristics (T_A=25°C unless otherwise specified)

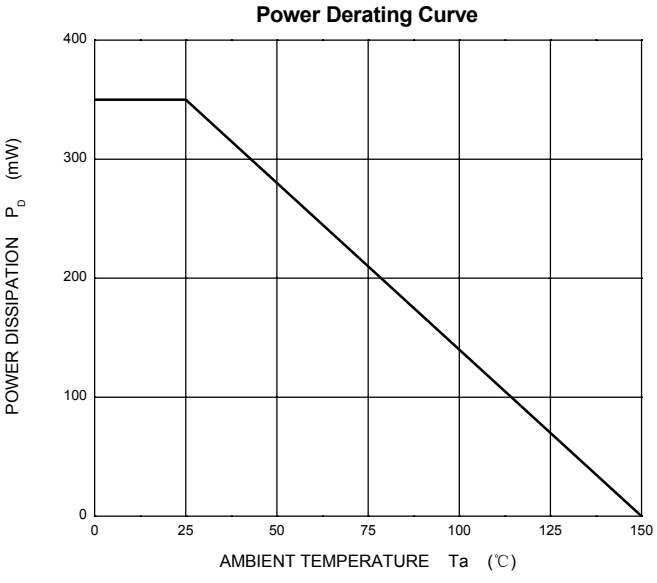
Parameter	Symbol	Min	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	100		V	I_R=100μA
Forward Voltage	V_{F1}		715	mV	$_F$=1mA
	V_{F2}		855	mV	$_F$=10mA
	V_{F3}		1000	mV	$_F$=50mA
	V_{F4}		1250	mV	$_F$=150mA
Reverse Current	I_{R1}		1	uA	$_R$=75V
	I_{R2}		25	nA	$_R$=20V
Diode Capacitance	C_D		2	pF	V_R=0,f=1MHz
Reverse Recovery Time	t_{rr}		4	ns	I_F =I_R=10mA, I_{rr}=0.1*I_R

Typical Characteristics Curves

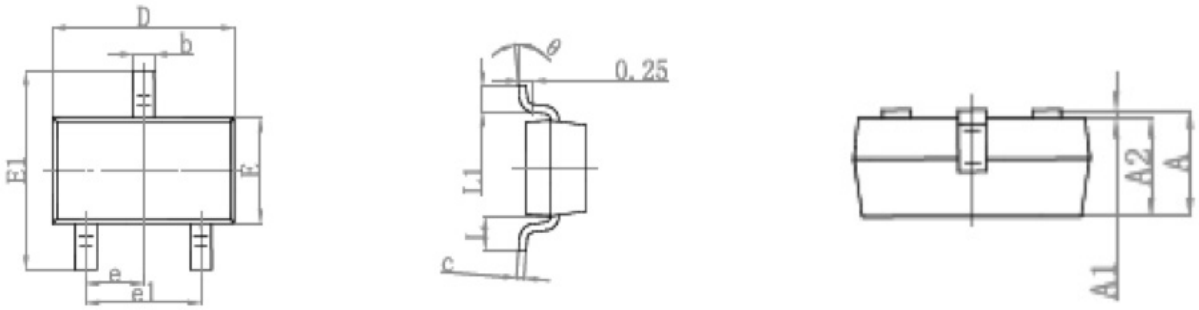






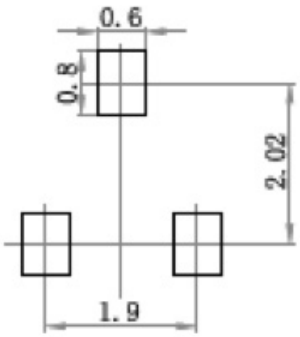


Package Outline Dimensions SOT-23



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.