

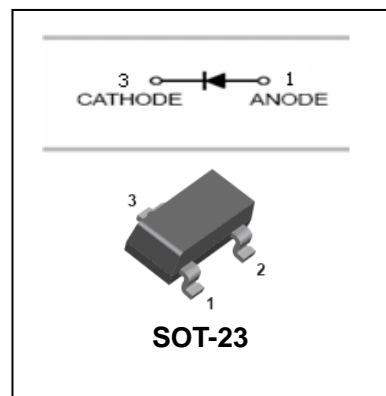


# MMBD914

## High-speed switching diode

### FEATURES

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



### APPLICATIONS

- High speed switching.

### ORDERING INFORMATION

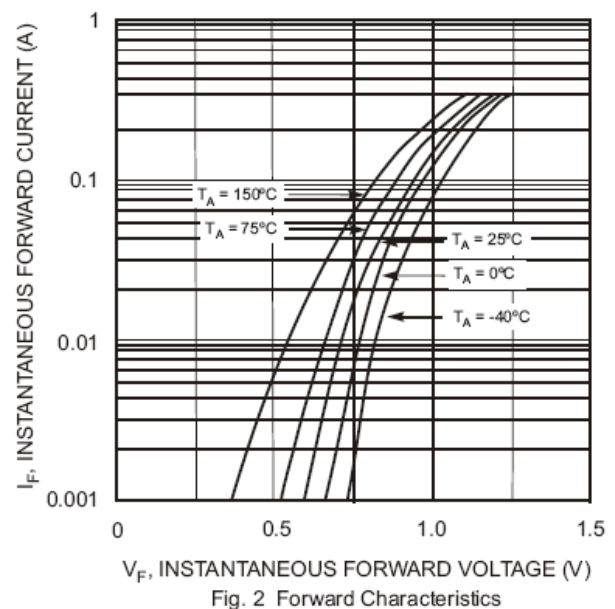
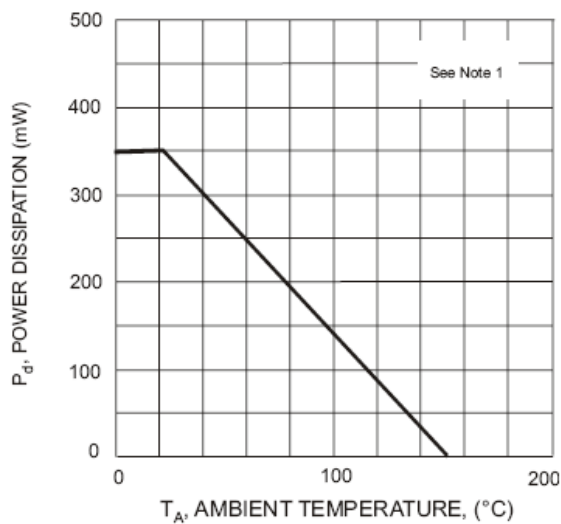
Type No.	Marking	Package Code
MMBD914	5D	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage DC Reverse Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	300	mA
Non -Repetitive Peak Forward Surge Current @t=1us @t=1s	$I_{FSM}$	2.0 1.0	A
Average Rectified Output Current	$I_O$	200	mA
Power Dissipation	$P_d$	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	°C/W
Operating and Storage Temperature Range	$T_j T_{STG}$	-65 to +150	°C

ELECTRICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75		V	$I_R=100\mu\text{A}$
Forward Voltage	$V_{F1}$ $V_{F2}$ $V_{F3}$ $V_{F4}$		715 855 1000 1250	mV	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$
Reverse Current	$I_R$		1.0 50 30 25	$\mu\text{A}$ $\mu\text{A}$ $\mu\text{A}$ nA	$V_R=75\text{V}$ $V_R=75\text{V}, T_j=150^\circ\text{C}$ $V_R=25\text{V}, T_j=150^\circ\text{C}$ $V_R=20\text{V}$
Reverse Recovery Time	$t_{rr}$		4	nS	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$
Diode Capacitance	$C_D$		2.0	pF	$V_R=0\text{V}, f=1\text{MHz}$

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

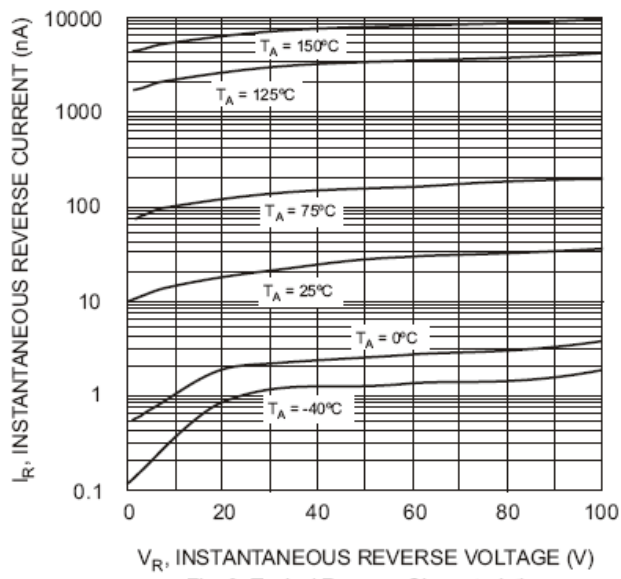


Fig. 3 Typical Reverse Characteristics

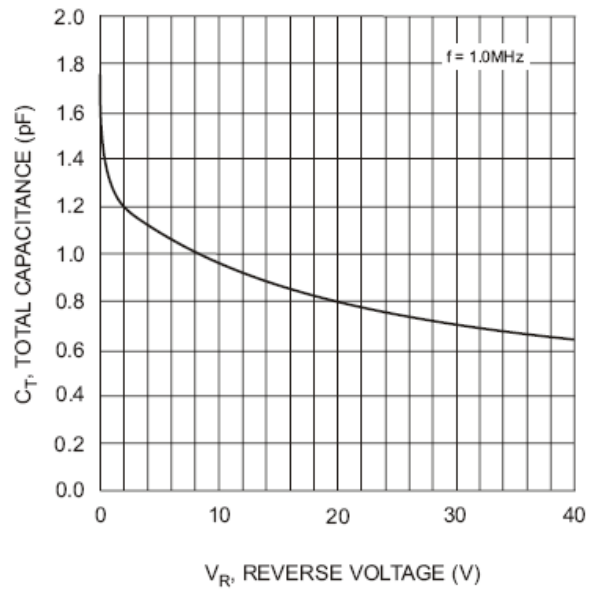
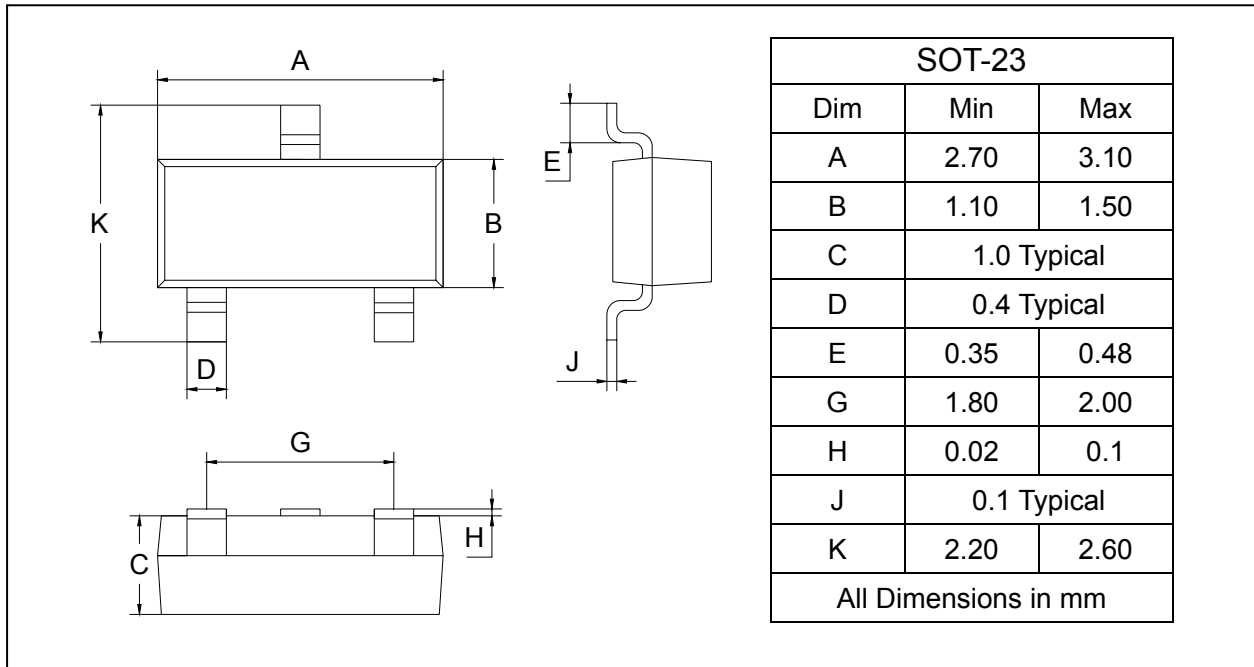


Fig. 4 Typical Capacitance vs. Reverse Voltage

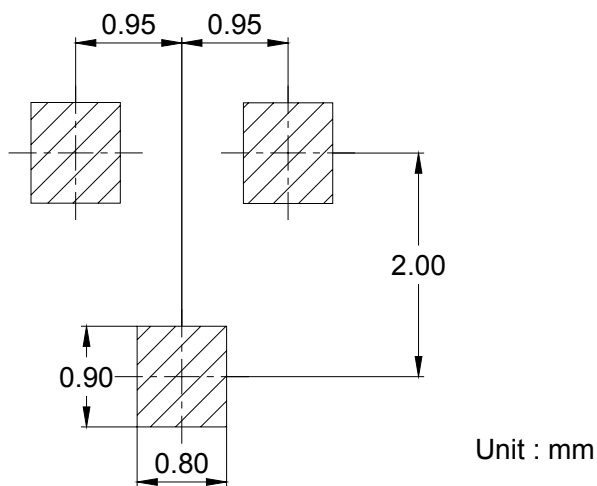
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
MMBD914	SOT-23	3000/Tape&Reel