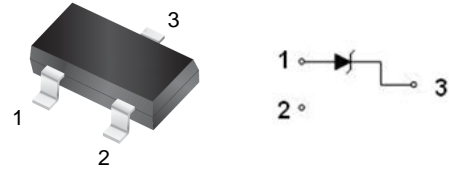


## Fast Switching Diode in SOT-23

### Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



### Mechanical Data

- **Case:** SOT-23 (plastic package).  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

- High Speed Switching and Reverse Polarity Protection
- High Speed Rectifying Applications
- Consumer, Automotive and Telecommunication Industry

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

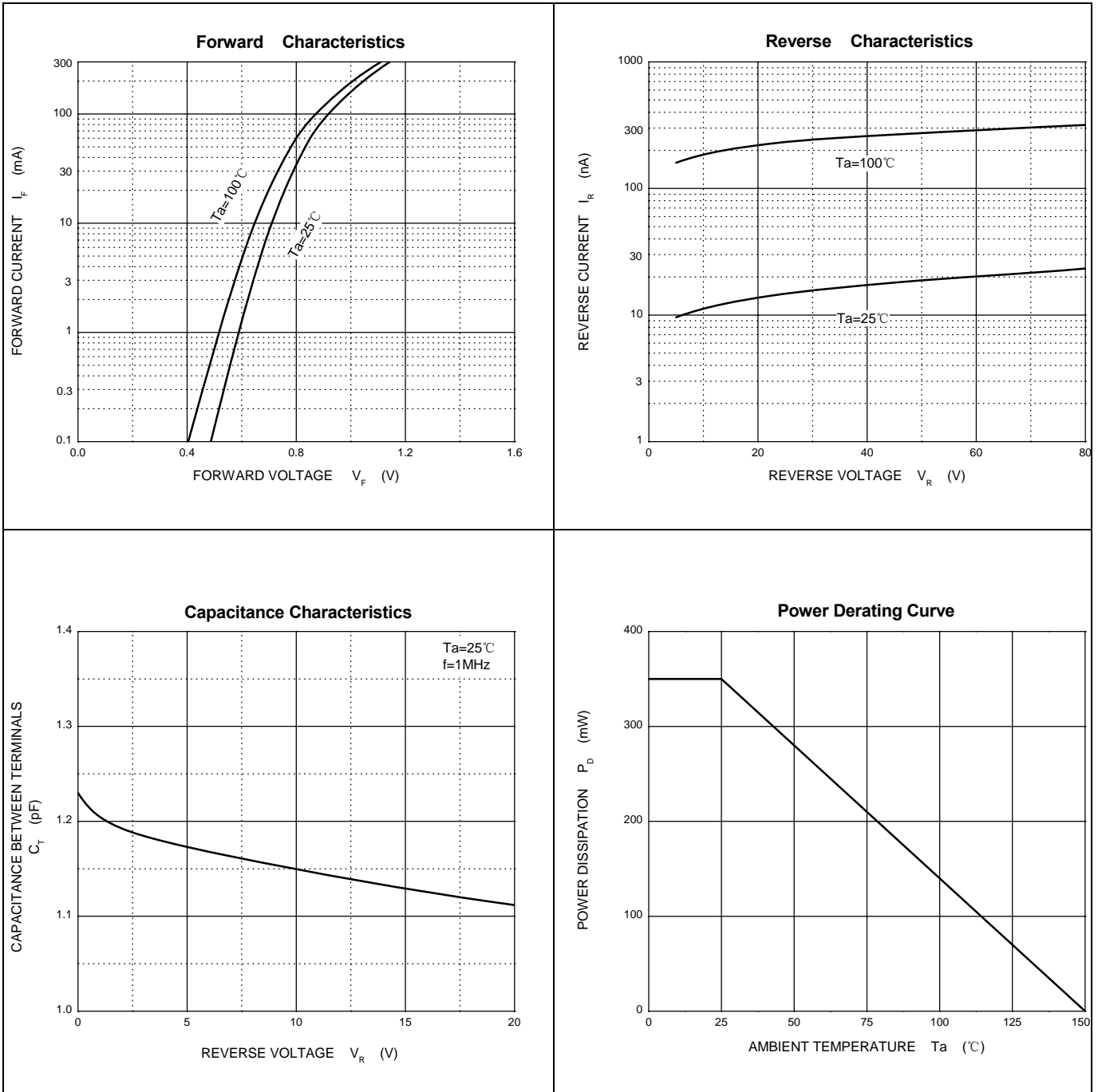
Parameter	Symbol	Limit	Unit
<b>Non-Repetitive Peak Reverse Voltage</b>	$V_{RM}$	100	V
<b>Peak Repetitive Peak Reverse Voltage</b>	$V_{RRM}$	100	
<b>Working Peak Reverse Voltage</b>	$V_{RWM}$		
<b>DC Blocking Voltage</b>	$V_R$		
<b>Average Rectified Output Current</b>	$I_O$	300	mA
<b>Non-Repetitive Peak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

### Electrical Characteristics

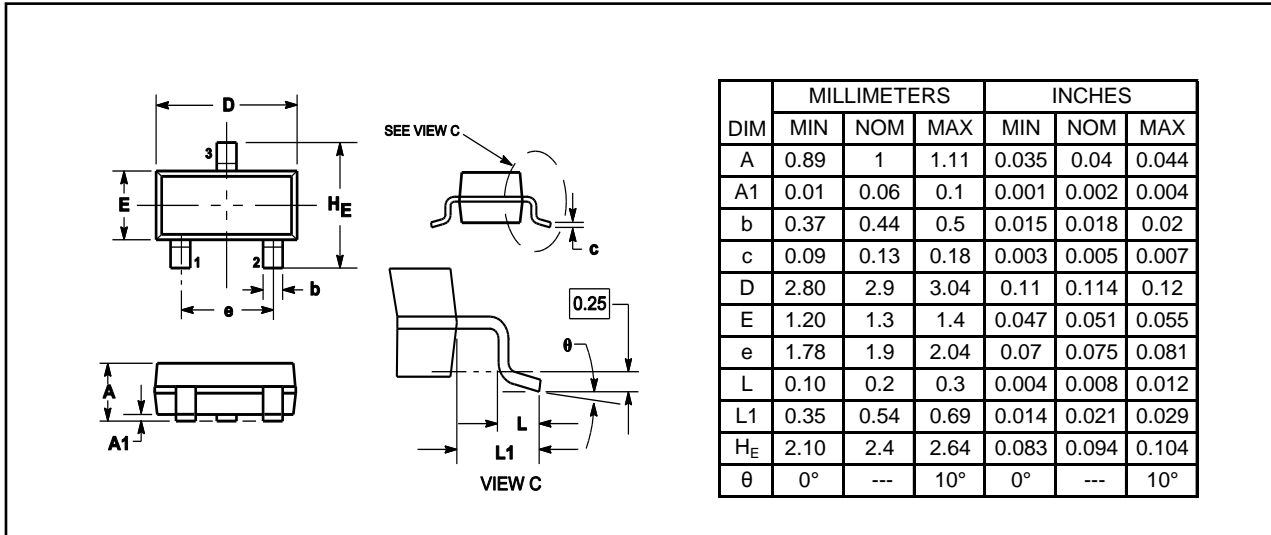
( $T_A = 25\text{ °C}$  unless otherwise specified)

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

**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



## Package Dimensions



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
MMBD914	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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