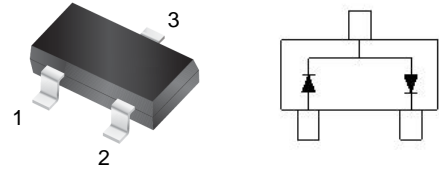


Fast Switching Diode in SOT-23

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

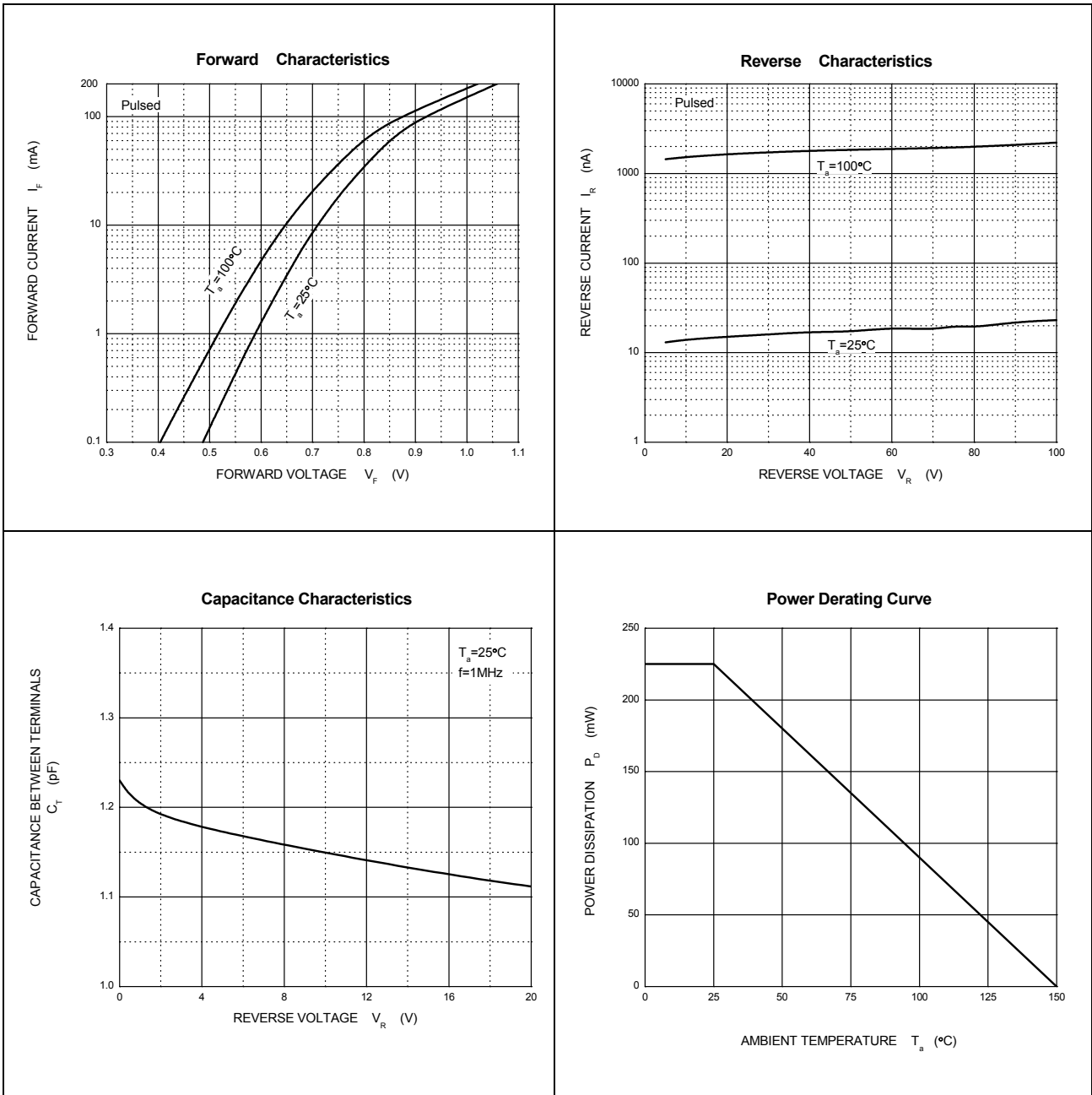
Symbol	Parameter	Value	Units
V_R	Reverse Voltage	100	V
V_R (RMS)	RMS Reverse Voltage	53	V
I_o	Average Rectified Output Current	200	mA
$R\theta_{JA}$	Thermal Resistance Junction to Ambient	556	°C/W
I_{FSM}	Peak Forward Surge Current $t=1s, Non\text{-}Repetitive$	0.5	A
P_D	Power Dissipation	225	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics

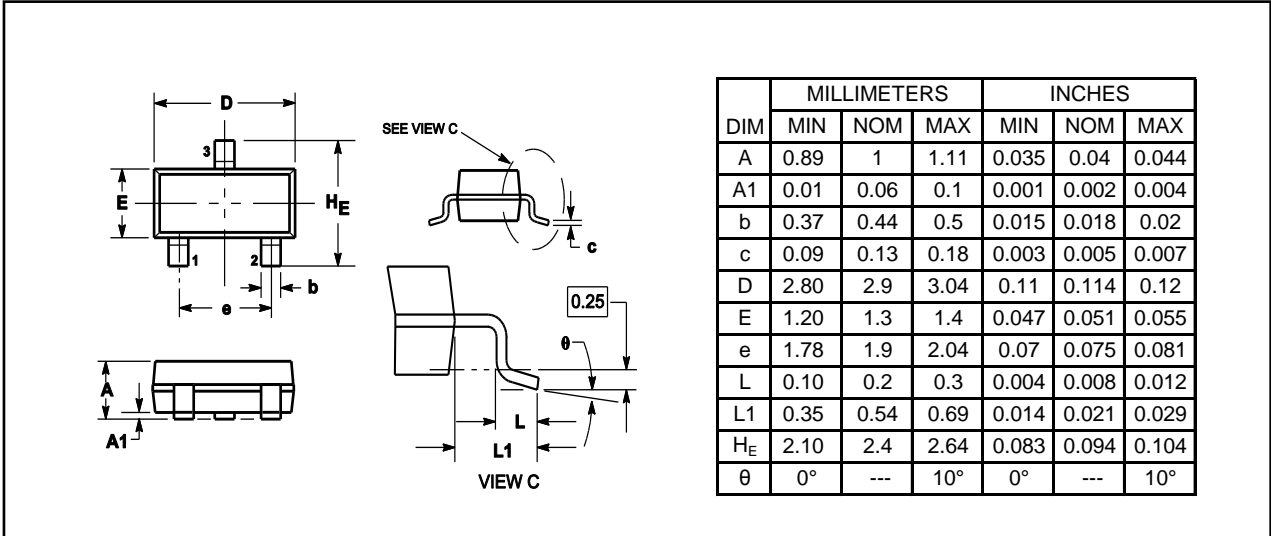
($T_A = 25\text{ °C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Max	Units
V_F	Forward Voltage	$I_F=10mA$		0.855	V
		$I_F=100mA$		1.1	V
V_R	Reverse breakdown voltage	$I_R=100\mu A$	100		V
I_R	Reverse voltage leakage current	$V_R=50V, T_J=25\text{ °C}$		1.0	uA
		$V_R=50V, T_J=125\text{ °C}$		100	
		$V_R=100V$		3.0	
C_T	Capacitance between terminals	$V_R=0V, f=1MHz$		2	pF
T_{rr}	Reverse recovery time	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		4	nS

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
MMBD7000	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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