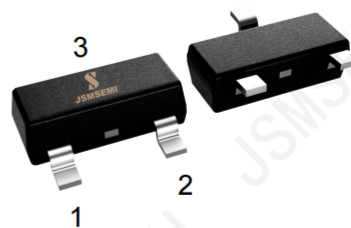


## FEATURES

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



SOT-23

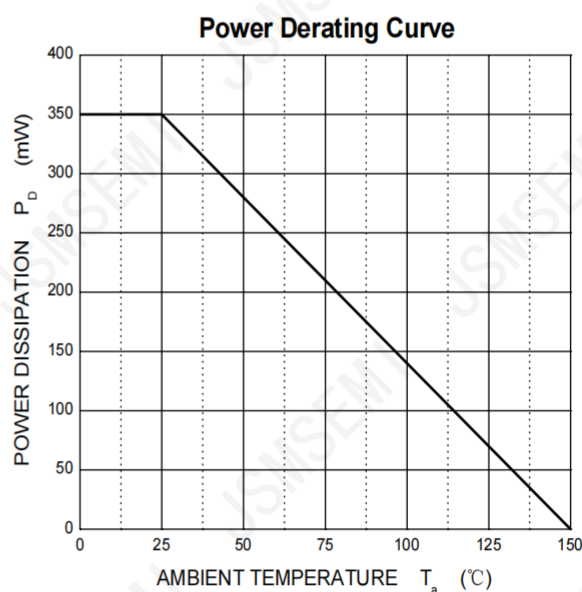
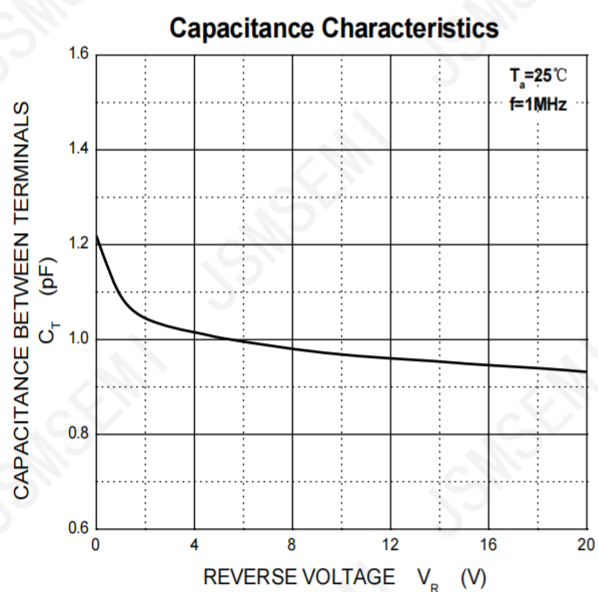
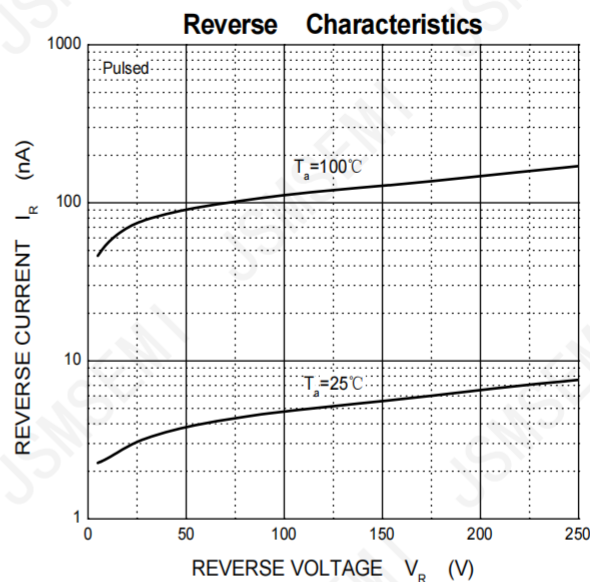
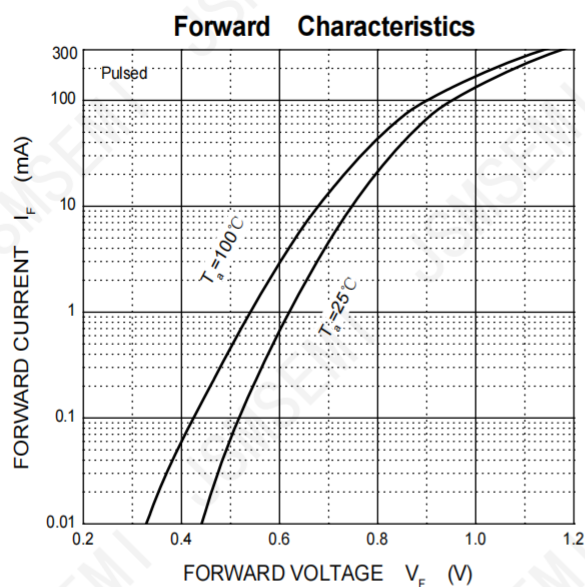
## MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted )

Symbol	Parameter	Value	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	250	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	175	V
$I_O$	Average Rectified Output Current	225	mA
$I_{FRM}$	Repetitive Peak Forward Surge Current	625	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	1.7	A
$P_D$	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	357	$^\circ\text{C/W}$
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

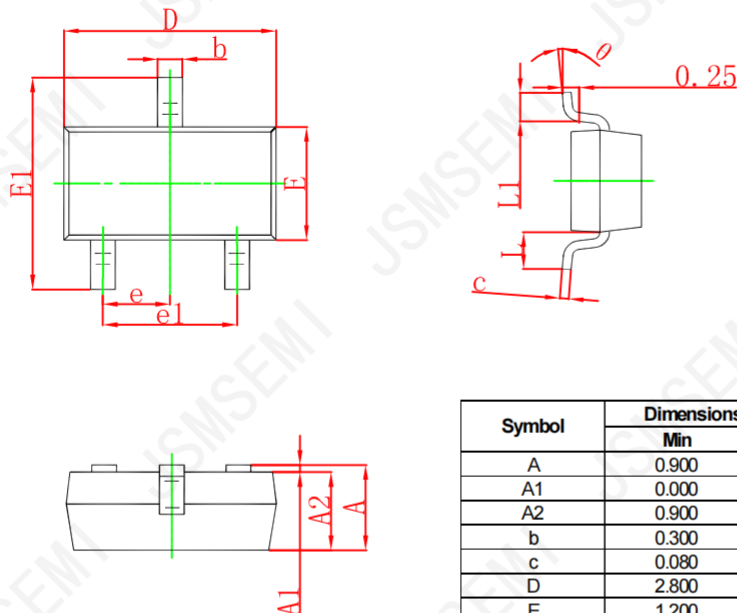
## ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	250			V
Reverse current	$I_R$	$V_R=250\text{V}$			0.1	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=100\text{mA}$			1	V
		$I_F=200\text{mA}$			1.25	
Total capacitance	$C_{tot}$	$V_R=0\text{V}, f=1\text{MHz}$			5	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=30\text{mA}, I_{rr}=0.1\times I_R, R_L=100\Omega$			50	ns

## Typical Characteristics

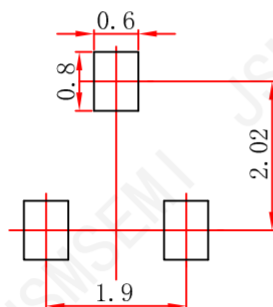


## SOT-23 Package Outline Dimensions



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°

## SOT-23 Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

## Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

## Important Notice

JSMSEMI Semiconductor (JSMSEMI) PRODUCTS ARE NEITHER DESIGNED NOR INTENDED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS UNLESS THE SPECIFIC JSMSEMI PRODUCTS ARE SPECIFICALLY DESIGNATED BY JSMSEMI FOR SUCH USE. BUYERS ACKNOWLEDGE AND AGREE THAT ANY SUCH USE OF JSMSEMI PRODUCTS WHICH JSMSEMI HAS NOT DESIGNATED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS IS SOLELY AT THE BUYER' S RISK.

JSMSEMI assumes no liability for application assistance or customer product design. Customers are responsible for their products and applications using JSMSEMI products.

Resale of JSMSEMI products or services with statements diferent from or beyond the parameters stated by JSMSEMI for that product or service voids all express and any implied warranties for the associated JSMSEMI product or s ervice. JSMSEMI is not responsible or liable for any such statements.

JSMSEMI All Rights Reserved. Information and data in this document are owned by JSMSEMI wholly and may not be edited, reproduced, or redistributed in any way without the express written consent from JSMSEMI.

Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the JSMSEMI product that you intend to use.

For additional information please contact Kevin@jsemsemi.com or visit www.jsemsemi.com