SOT-23 Plastic-EncapsulateSwitchingDiodes

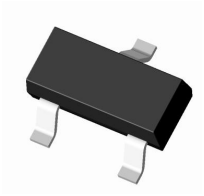
Features

- Very Low Leakage Current
- Low Reverse Recovery Time
- Halogen-free Package
- Surface Mount Package
- Epoxy UL: 94V-0

Applications

- Low Leakage Current Applications
- High Speed Switch Applications

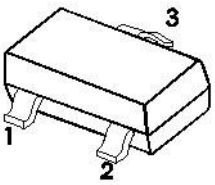
Pb
RoHS
COMPLIANT



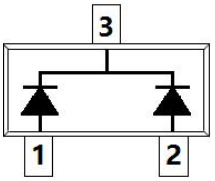
Marking:JX

SOT-23

Pin definition



Epuivalent circuit



Maximum Ratings & Electrical Characteristics(T_A=25℃ unless otherwise noted)

Parameter		Symbol	Value	Unit
Working Peak Reverse Voltage		V_{RM}	85	V
RMS Reverse Voltage		$V_{R(RMS)}$	60	V
Reverse Voltage		V_R	85	V
Non-repetitive pak frward crrent		I_{FM}	125	mA
Repetitive Peak Forward Current		I_{FRM}	500	mA
Non-RepetitivePeakForwardSurge Currentt	@ t = 1.0s	I_{FSM}	4	A
	@ t = 1.0ms		1	A
	@ t = 1.0s		0.5	A
Power Dissipation		P_D	150	mW
Thermal Resistance Junction to Ambient Air (Note 1)		$R_{\theta JA}$	833	℃/W
Operating and Storage Temperature Range)		T_J, T_{STG}	-65 to+150	℃

Electrical Specifications(T_A=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage (Note 3)	V(BR)	IR = 100uA	85			V
Forward Voltage	V_F	IF = 1.0mA			0.9	V
		IF = 10mA			1.0	V
		IF = 50mA			1.1	V
		IF = 150mA			1.25	V
Leakage Current (Note 3)	IR	VR = 75V			5	nA
		VR = 75V, Tj = 150℃			80	nA
Diode Capacitance	CD	VR = 0, f = 1.0MHz		2		pF
Reverse Recovery Time	TRR	IF = IR = 10mA, Irr = 0.1xIR, RL = 100Ω			3.0	nS

Notes :

1 .Device mounted on FR-4 PC board with recommended pad layout.

2. No purposefully added lead.

3. Short duration test pulse used to minimize self-heating effec

Ratings and Characteristics Curves

(T_A = 25℃ unless otherwise noted)

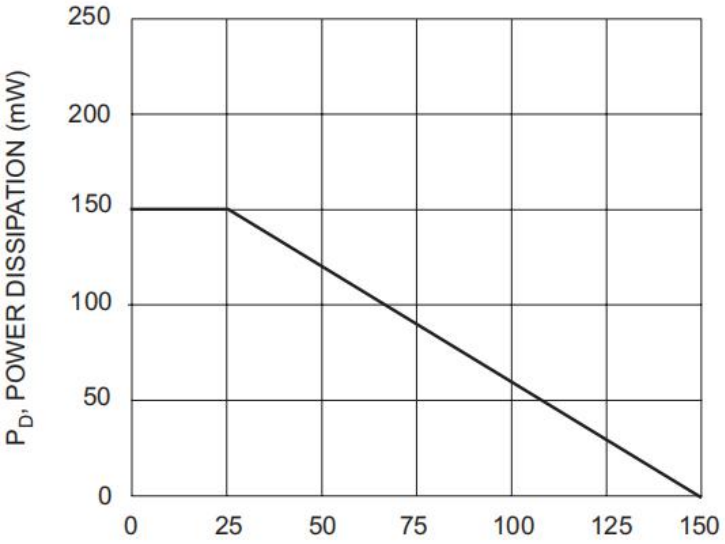


Fig. 1 Power Derating Curve

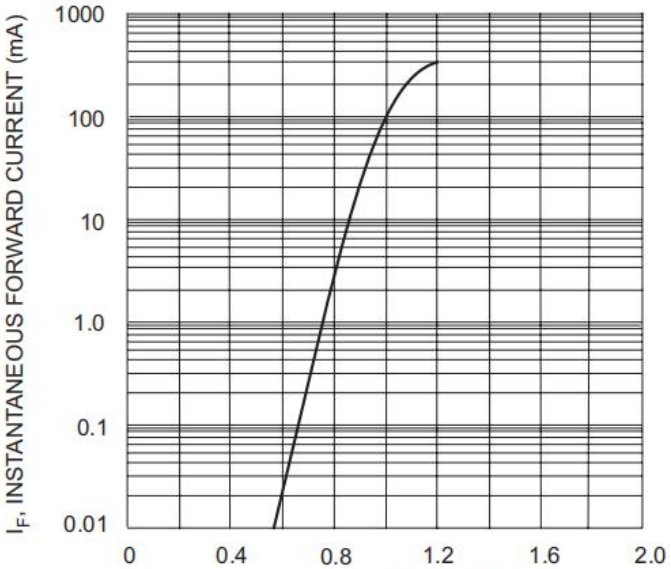


Fig. 2 Typical Forward Characteristics

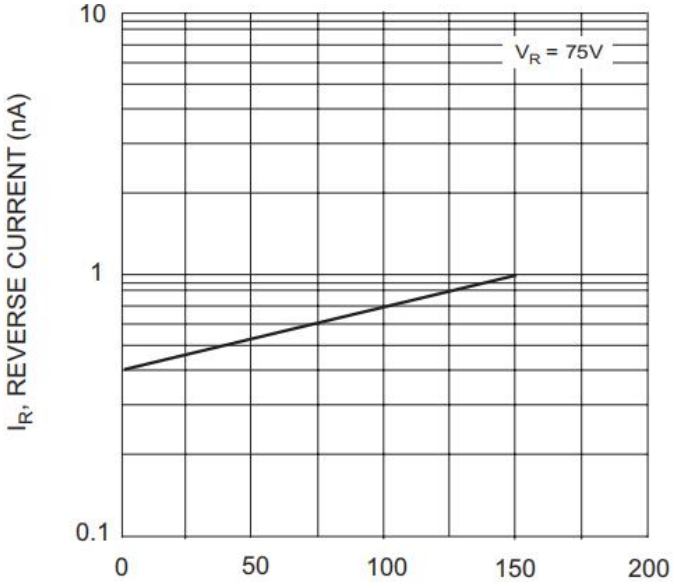


Fig. 3 Typical Reverse Characteristics

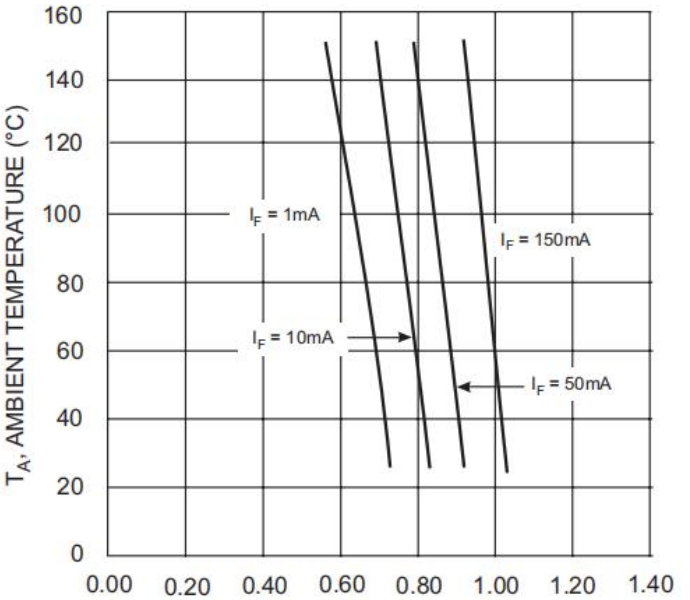
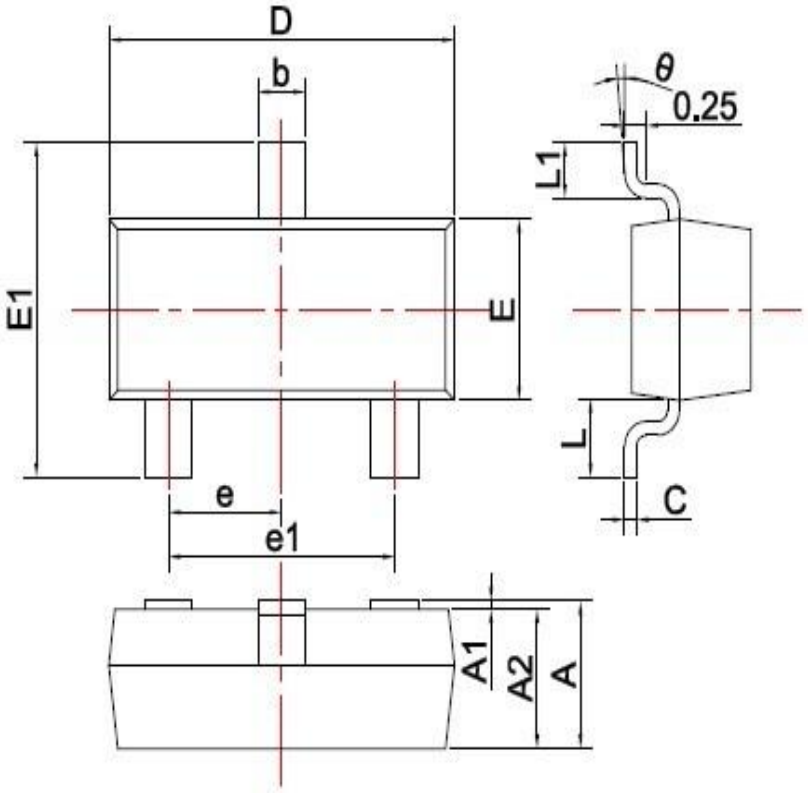


Fig. 4 Typical Forward Voltage vs Ambient Temperature

Package Outline Dimensions

in inches (millimeters)



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

Revision History

Document Version	Date of release	Description of changes
Rev.A	2018.07.07	First issue

Disclaimers

These materials are intended as a reference to assist our customers in the selection of the Suzhou Good-Ark product best suited to the customer's application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Suzhou Good-Ark Electronics Co., Ltd.or a third party.

Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, or infringement of any third-party's rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.

All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Suzhou Good-Ark Electronics Co., Ltd. without notice due to product improvements or other reasons. It is therefore recommended that customers contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized Suzhou Good-Ark Electronics Co., Ltd. for the latest product information before purchasing a product listed herein. The information described here may contain technical inaccuracies or typographical errors. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors. Please also pay attention to information published by Suzhou Good-Ark Electronics Co., Ltd. by various means, including our website home page.
(http://www.goodark.com)

When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, Please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability or other loss resulting from the information contained herein.

The prior written approval of Suzhou Good-Ark Electronics Co., Ltd. is necessary to reprint or reproduce in whole or in part these materials.

Please contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized distributor for further details on these materials or the products contained herein.