FEATURES

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



SOT-23-3

APPLICATIONS

- Small signal switching.

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Limits	Unit
DC Reverse Voltage	V_R	100	V
Forward Continuous Current(Max.)	I_{FM}	600	mA
Average rectified Current	$I_{F(AV)}$	200	mA
Recurrent peak forward current	I_{FRM}	700	mA
Non-repetitive peak forward surge current (1.0s) (1.0m)	I_{FSM}	1.0 2.0	A
Power Dissipation	P_d	350	mW
Thermal resistance,Junction to ambient	$R_{\theta JA}$	357	℃/W
Operating junction temperature	T_J	150	℃
Storage temperature range	T_{STG}	-55 to +150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R1}$	100			V	I_R=100μA
	$V_{(BR)R2}$	75			V	I_R=5μA
Forward voltage	V_F			1	V	I_F=10mA
Reverse current	I_{R1}			25	nA	V_R=20V
	I_{R2}			5	μA	V_R=75V
Total Capacitance	C_T			4	pF	V_R=0V,f=1MHz
Reverse Recovery Time	t_{rr}			4	ns	I_F=10mA,V_R=6V I_{rr}=0.1*I_R,R_L=100Ω

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

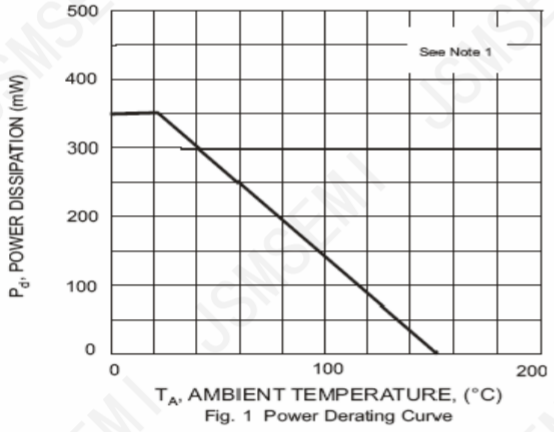


Fig. 1 Power Derating Curve

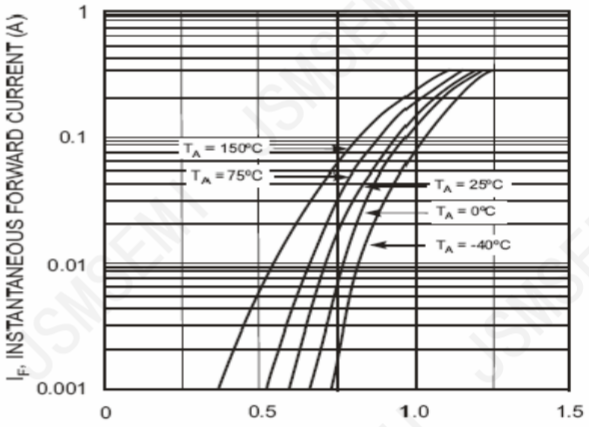


Fig. 2 Forward Characteristics

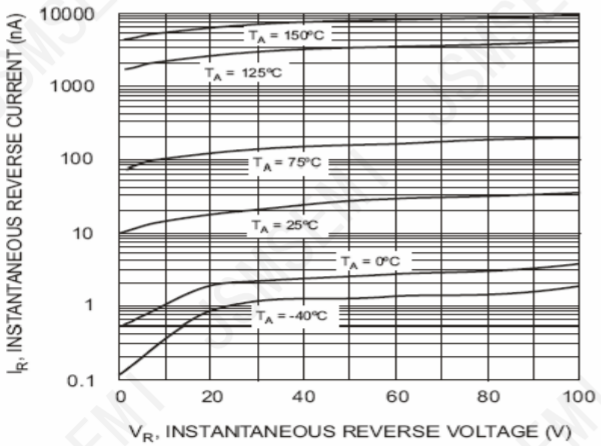


Fig. 3 Typical Reverse Characteristics

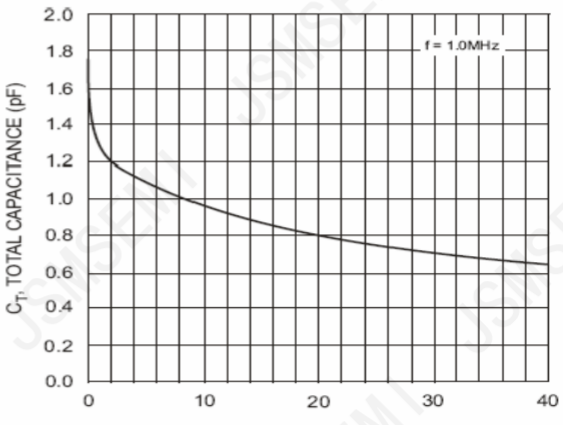
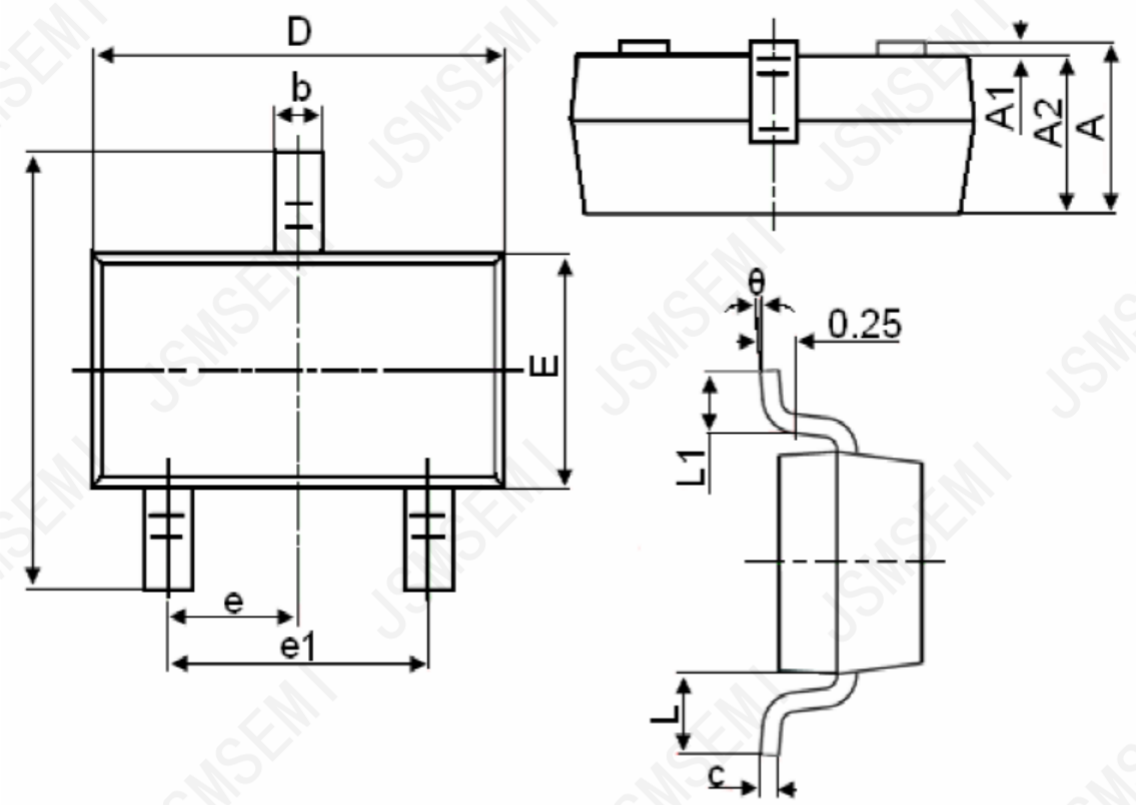


Fig. 4 Typical Capacitance vs. Reverse Voltage

Package Information

SOT-23



Symbol	Dimensions in Millimeters(mm)		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	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Revision History

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

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