![GOOD-ARK logo]

SOT-23 Plastic - Encapsulate Switching Diode

Features

- 4.0nS; Fast Switching Device (TRR <4.0nS)
- 150mW; Power Dissipation of 150mW
- High Stability and High Reliability.
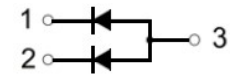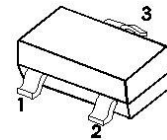- Low reverse leakage

Mechanical Data

- SOT-23,Small Outline Plastic Package.
- Epoxy UL: 94V-0
- Mounting Position: Any

Pb RoHS COMPLIANT

Marking : A3   **SOT-23**

Pin definition   **Epuivalent circuit**

Maximum Ratings & Thermal Characteristics (TA=25℃ unless otherwise noted)

| Parameters	Symbol	Value	Unit
Reverse Voltage	V_R	80	V
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Power Dissipation	P_D	150	mW
Average Rectified Current	I_O	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms; TA=25℃	I_{FSM}	2.0	A
Operating junction temperature	T_J	150	℃
Storage temperature range	T_S	-55-+150	℃
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	℃/W

Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (TA=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition	Limits			Unit
			Min	Typ	Max	
ReverseVoltage	$V_{(BR)}$	IR=100uA	80			V
Reverse Leakage Current	I_R	VR=80V			0.5	uA
		VR=30V			0.1	uA
Forward Voltage	V_F	IF=1mA		0.61	1.20	V
		IF=10mA		0.74		
		IF=100mA		0.92		
Reverse Recovery Time	T_{RR}	IF= IR=10mA VR=6V,RL=100 Ω IRR=0.1 X IR			4	nS
Capacitance	C_T	VR=0V,f=1MHZ		2.2	4	pF

Ratings and Characteristics Curves

(T_A = 25℃ unless otherwise noted)

Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve
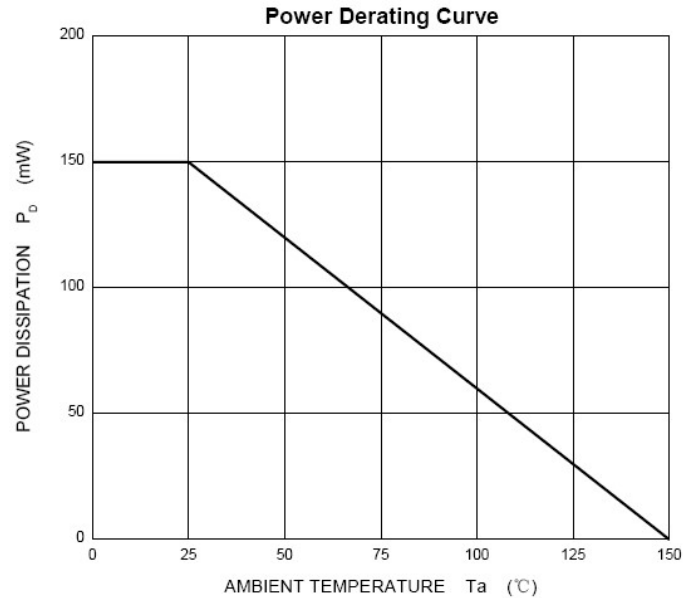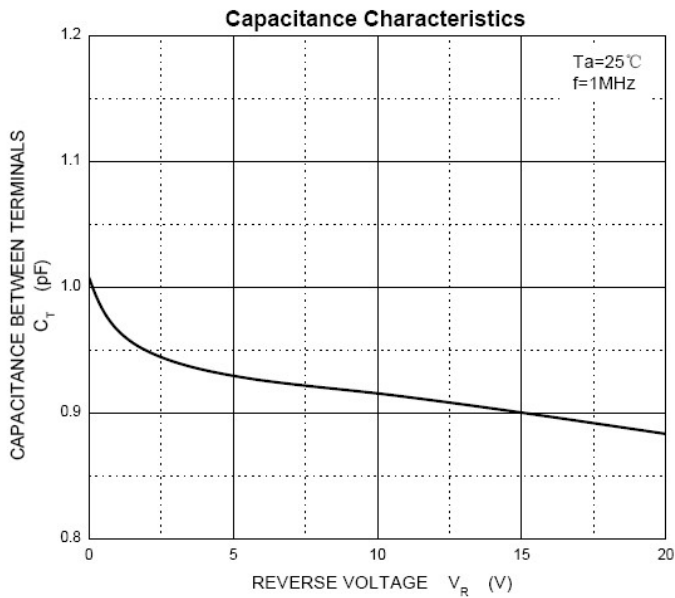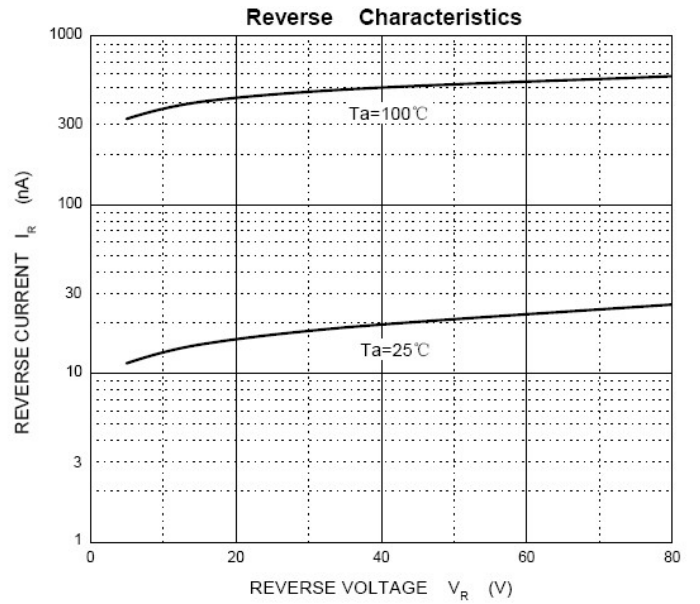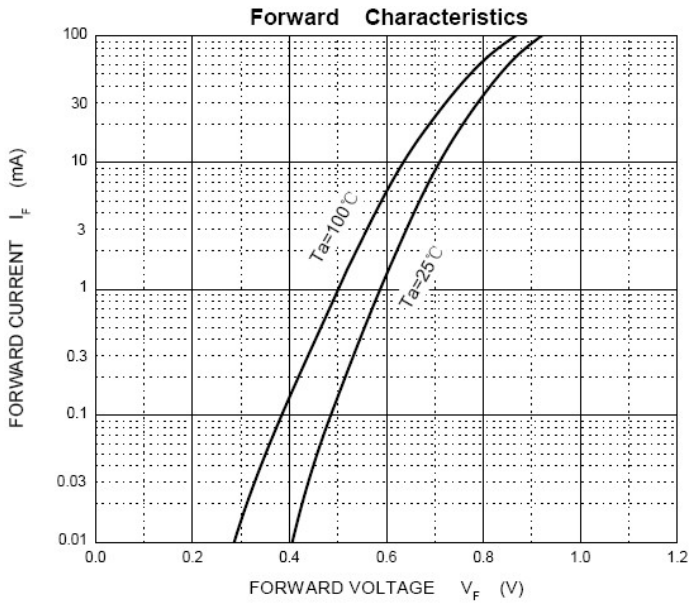
Package Outline Dimensions

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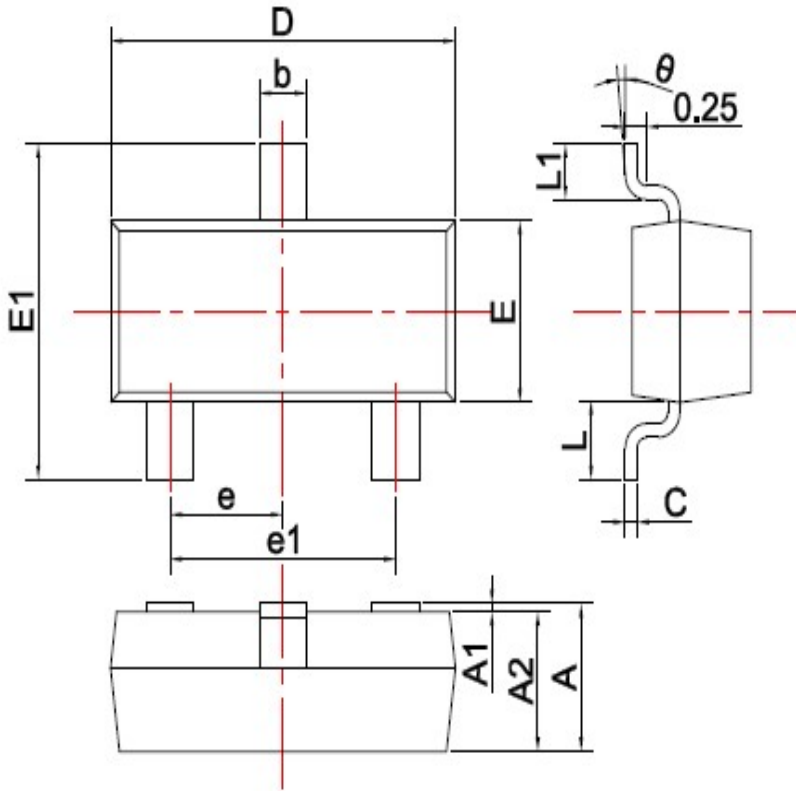
SYMBOL	DIMENSIONS MIN.	DIMENSIONS MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

Revision History

Document Version	Date of release	Description of changes
Rev.A	2019.10.31	First issue

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