

SOT-23 Plastic-Encapsulate Diodes

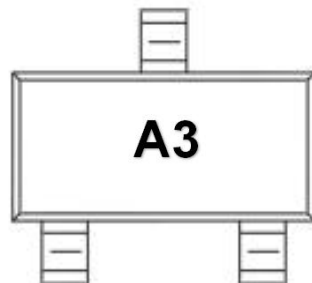
1SS181

Switching Diodes

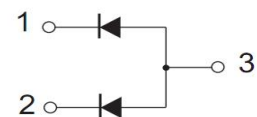
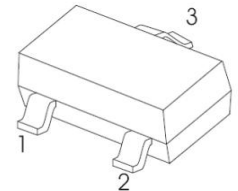
FEATURES:

- **LOW Forward Voltage**
- **Fast Reverse Recovery Time**

MARKING: A3



SOT-23



Solid dot = Green molding compound device, if none, the normal device.

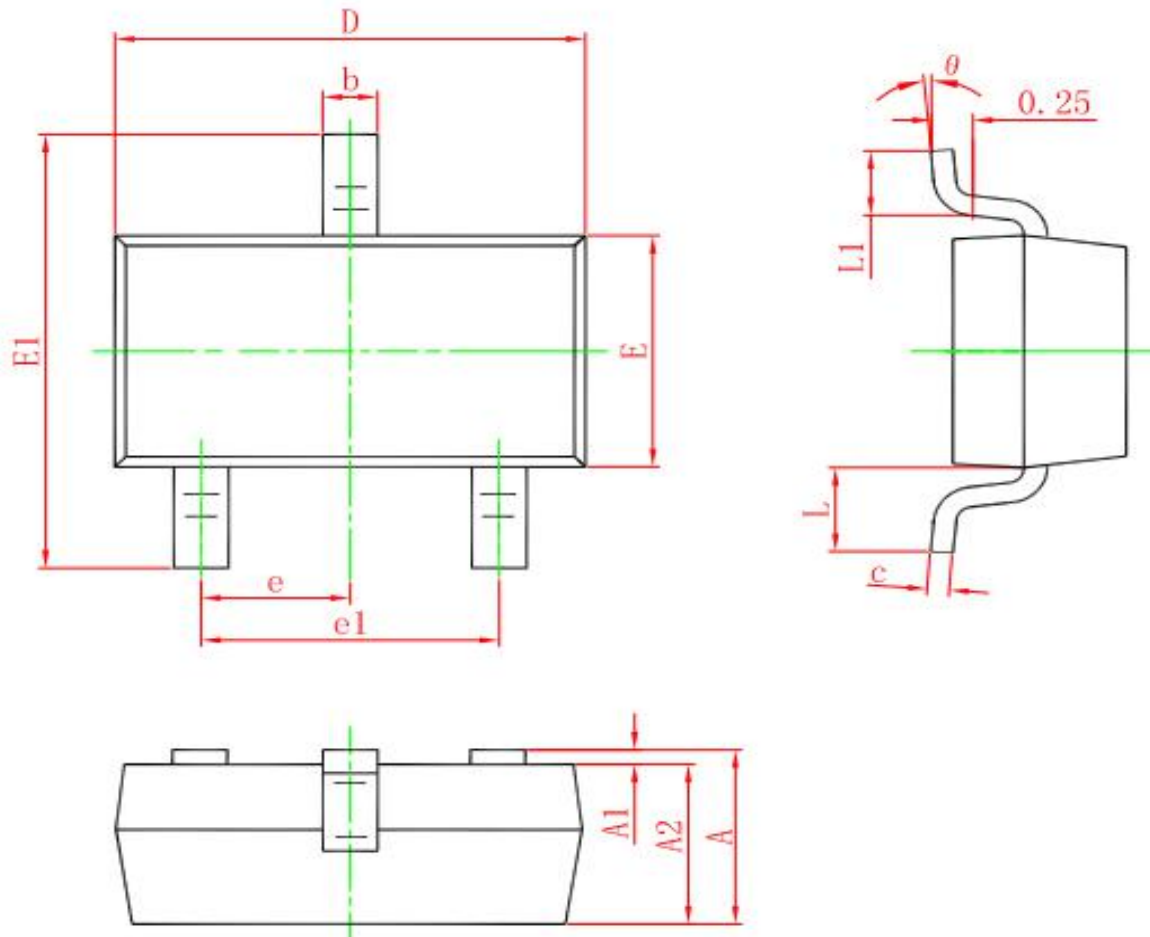
Maximum ratings (@Ta=25℃)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	VRM	85	V
DC Blocking Voltage	VR	80	V
Forward Continuous Current	IFM	300	mA
Average Rectified Output Current	IO	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	2.0	A
Power Dissipation	PD	150	mW
Thermal Resistance from Junction to Ambient	RθJA	833	℃/W
Junction Temperature	TJ	150	℃
Storage Temperature Range	TSTG	-55~+150	℃

Electrical Characteristics (@Ta=25℃)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	V(BR)	IR=100μA	80			V
Forward voltage	VF1	IF=1mA		0.61		V
	VF2	IF=10mA		0.74		V
	VF3	IF=100mA		0.92	1.2	V
Reverse current	IR1	VR=30V			0.1	uA
	IR2	VR=80V			0.5	uA
Capacitance between terminals	CT	VR=0V, f=1MHz		2.2	4.0	PF
Reverse recovery time	t _{rr}	IF=IR=10mA, Irr=0.1×IR		1.6	4.0	nS

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°