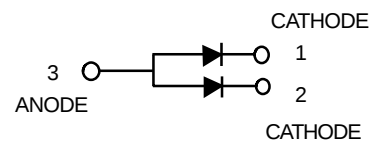
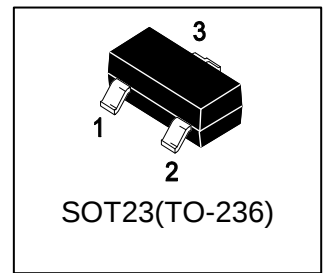


Ultra High Speed Switching Application

1. FEATURES

- Low forward voltage : $V_F(3) = 0.92V$ (typ.)
- Fast reverse recovery time : $t_{rr} = 1.6ns$ (typ.)
- Small total capacitance : $C_T = 2.2pF$ (typ.)
- We declare that the material of product complies with RoHS requirements and Halogen Free.



2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
1SS181	A3	3000/Tape&Reel

3. MAXIMUM RATINGS($T_a = 25^\circ C$)

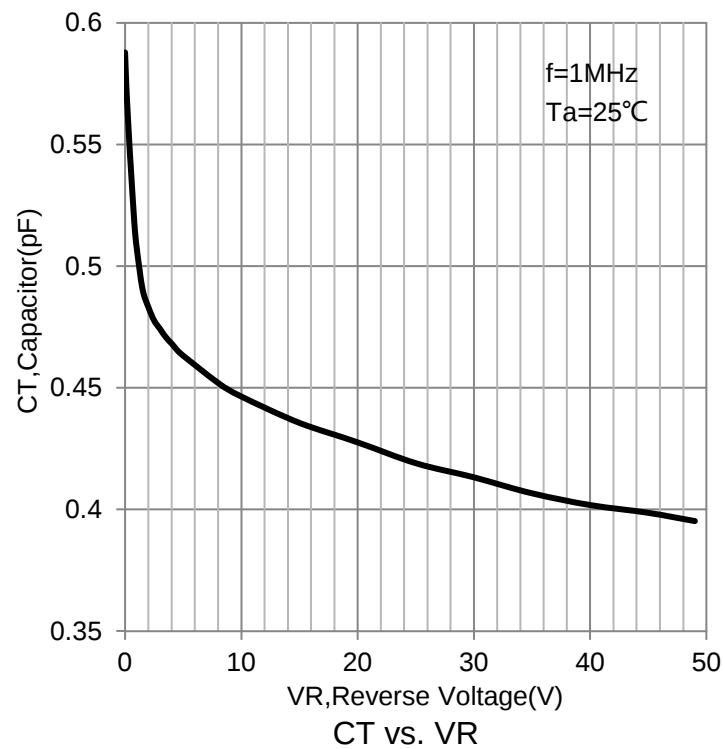
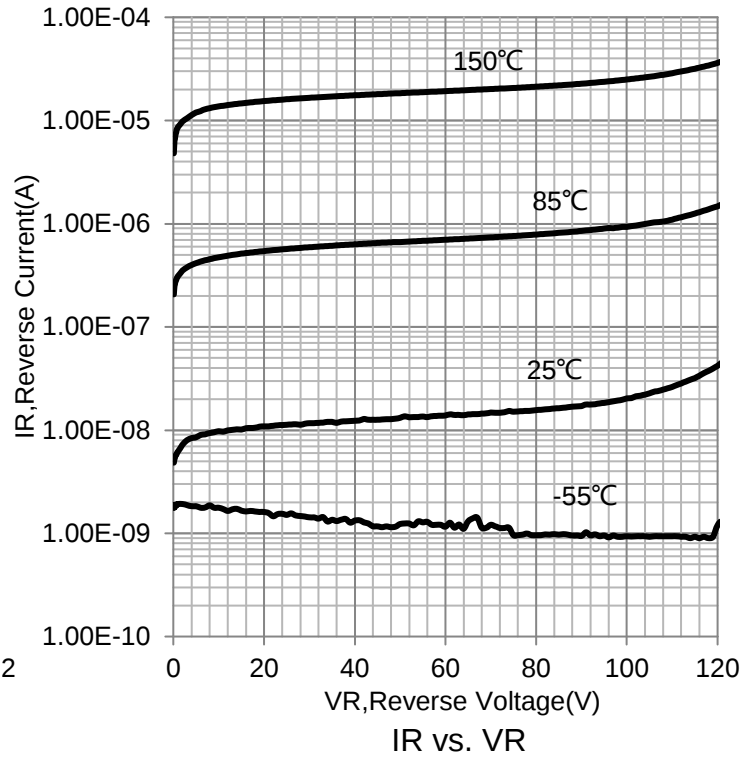
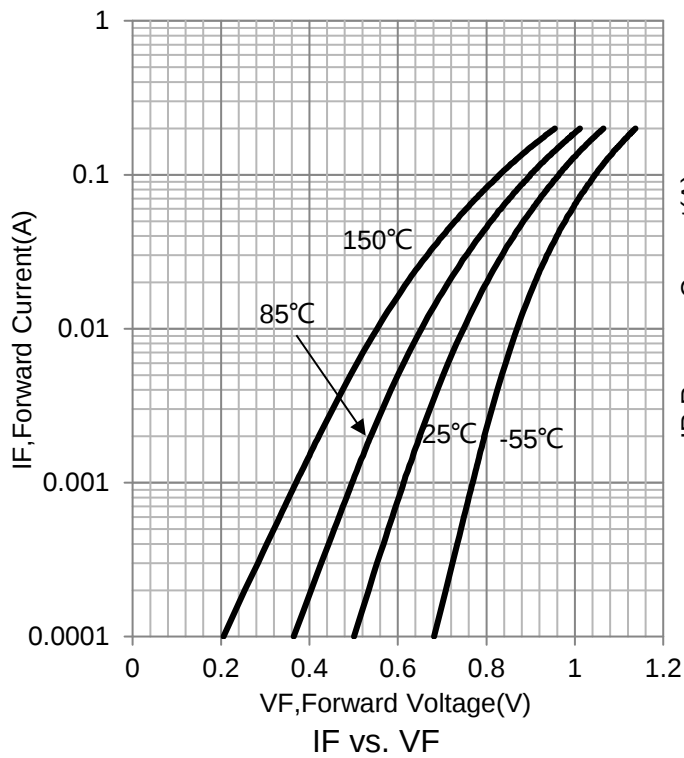
Parameter	Symbol	Limits	Unit
Maximum (peak) reverse voltage	VRM	85	V
Reverse voltage	VR	80	V
Maximum (peak) forward current	IFM	300(Note 1)	mA
Average forward current	IO	100(Note 1)	mA
Surge current (10ms)	IFSM	2(Note 1)	A
Power dissipation	P	150	mW
Junction temperature	Tj	125	$^\circ C$
Storage temperature range	Tstg	-55 to +125	$^\circ C$

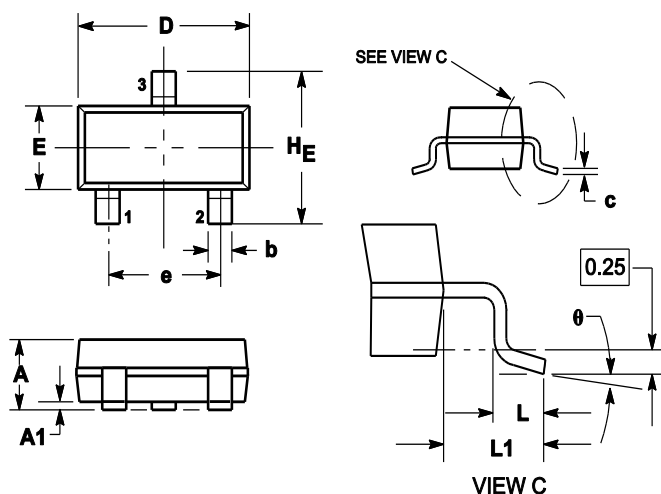
1. Unit rating. Total rating = Unit rating $\times$ 1.5.

4. ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTICS	Symbol	Min	Typ.	Max	Unit
Forward voltage ($I_F = 1mA$)	VF	-	0.61	-	V
($I_F = 10mA$)		-	0.74	-	
($I_F = 100mA$)		-	0.9	1.2	
Reverse current ($V_R = 30V$)	IR	-	-	0.1	μA
($V_R = 80V$)		-	-	0.5	
Total capacitance ($f = 1MHz, V_R = 0$)	CT	-	2.2	4	pF
Reverse Recovery Time ($I_F = 10mA$)	Trr	-	1.6	4	nS

5.ELECTRICAL CHARACTERISTICS CURVES





DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

