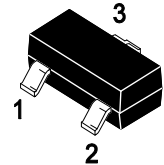
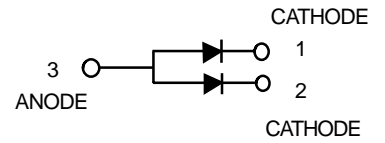




### 1SS181 Ultra High Speed Switching Application

#### 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 compliance with RoHS requirements and Halogen Free.



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#### 2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
1SS181	A3	3000/Tape&Reel

#### 3. MAXIMUM RATINGS(Ta = 25°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	°C
Storage temperature range	Tstg	-55 to +125	°C

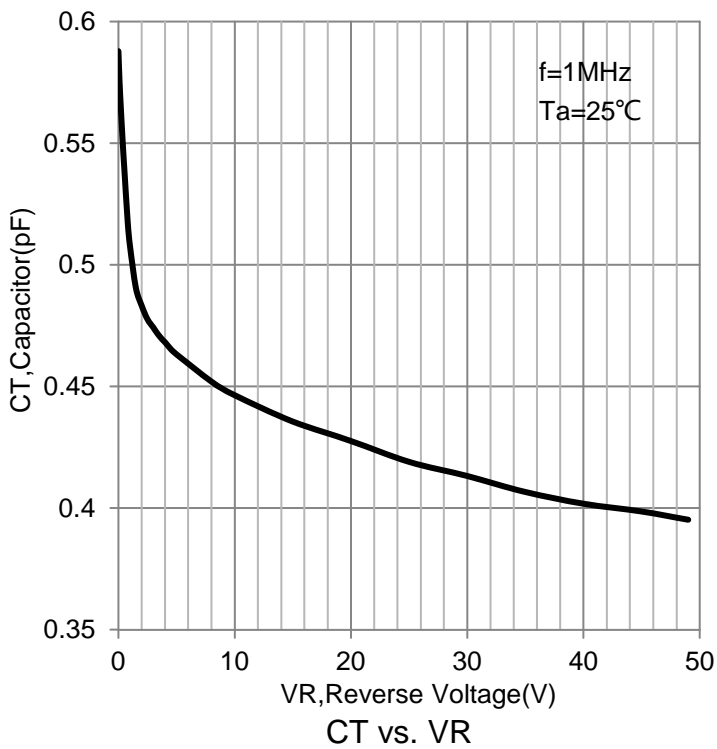
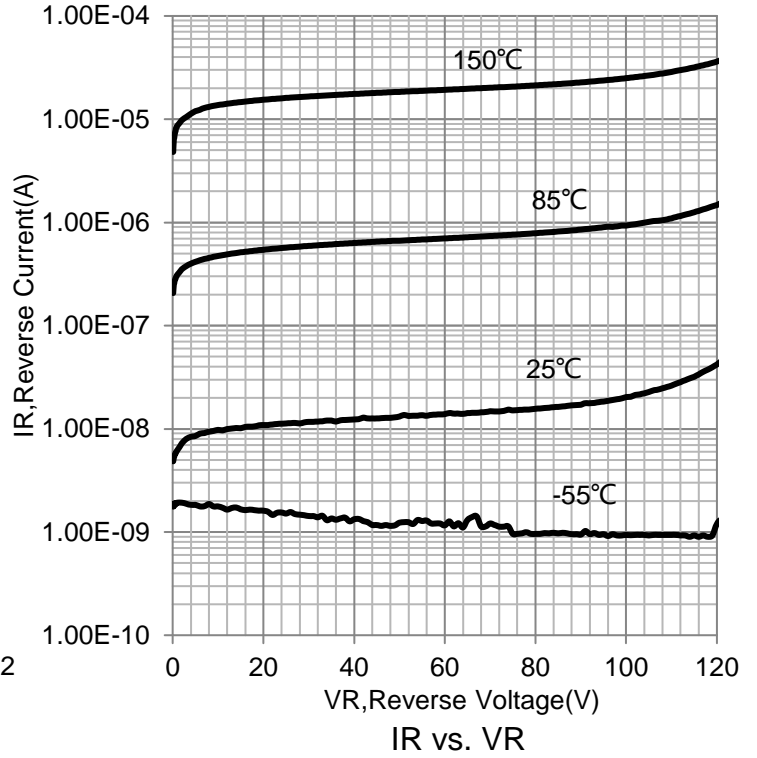
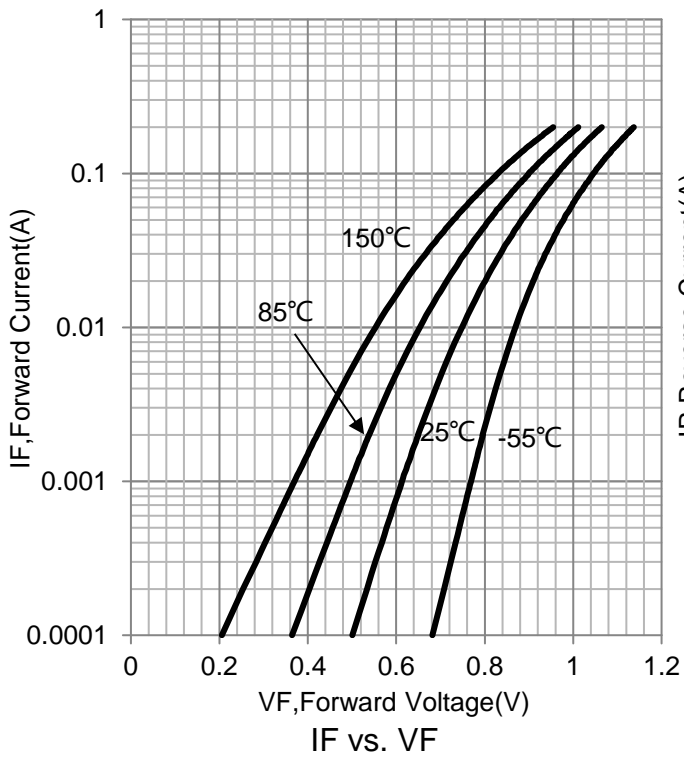
1. Unit rating. Total rating = Unit rating × 1.5.

#### 4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

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



## 5. ELECTRICAL CHARACTERISTICS CURVES

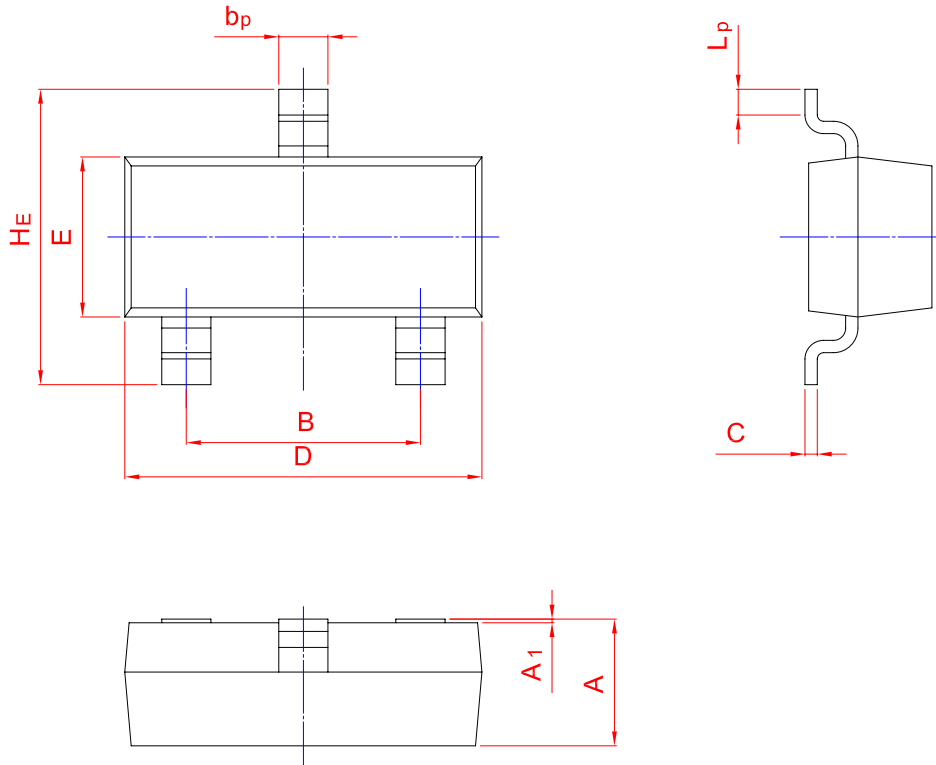
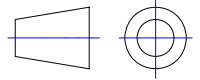




## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20