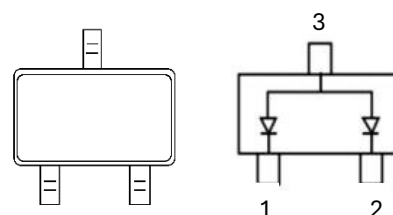


FEATURES AND BENEFITS

Product Summary		
I_F	150mA	@25 °C
V_F	715mV	@1mA
V_{RRM}	80V	@25 °C

- For High-Speed Switching Applications
- Low Current Leakage
- RoHS Compliant / Green EMC UL Flammability Classification Rating 94V-0
- Matte Tin (Sn) Lead finish Solderable per MIL-STD-202, Method 208
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.006 grams (Approximate)

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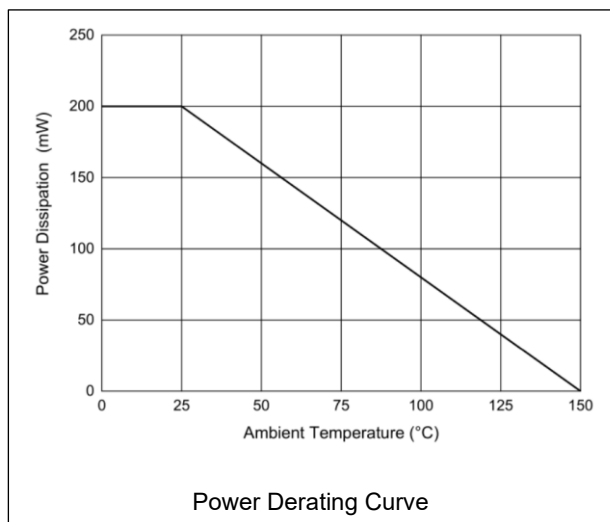
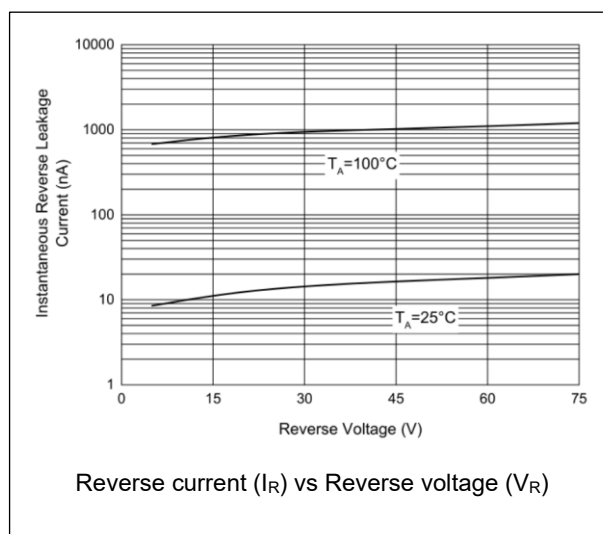
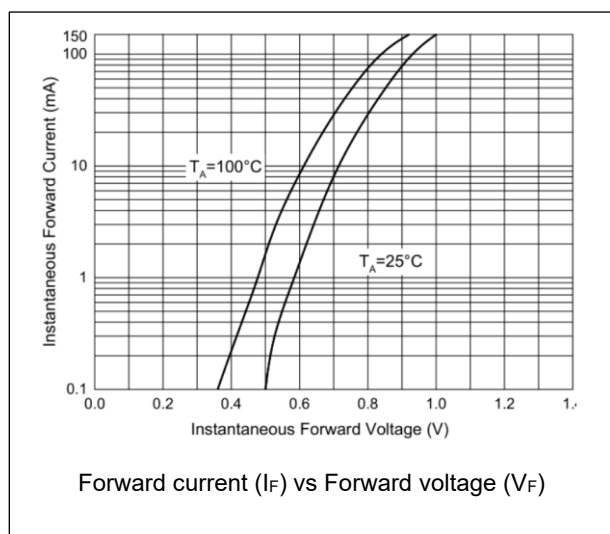
Maximum Ratings (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	80	V
Working Peak Reverse Voltage	V_{RWM}	80	V
Forward Current	I_F	150	mA
Non-Repetitive Peak Forward Surge Current (@t=8.3ms)	I_{FSM}	2.0	A
Power Dissipation	P_{TM}	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

THERMAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Thermal Resistance from Junction to Ambient*	$R_{\theta JA}$	625	°C/W

* Device mounted on 1"x1" FR4 PCB

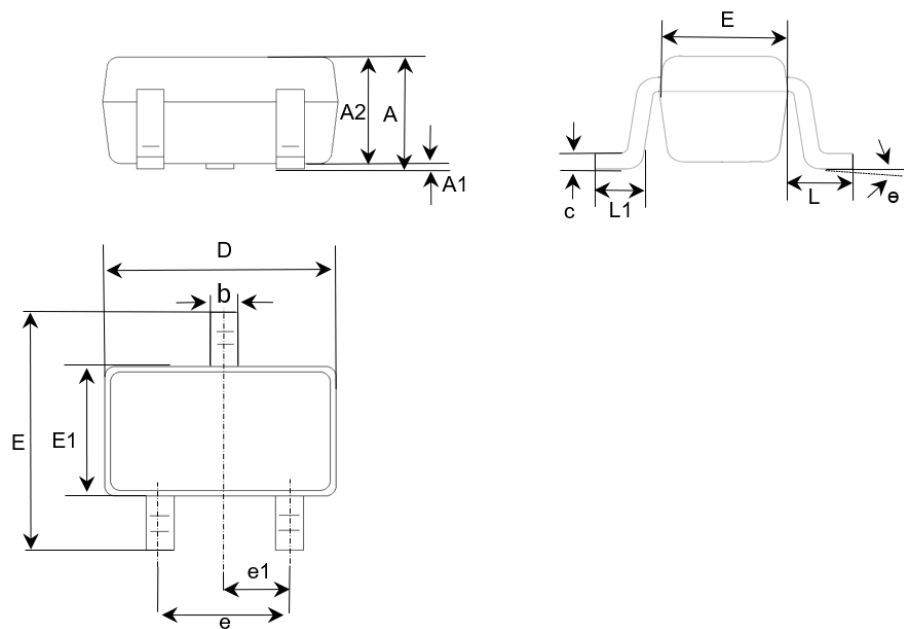
ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	CONDITION	MIN	MAX	UNIT
Reverse breakdown voltage	V_{BR}	$I_R = 100\mu A$	80		V
Forward Voltage	V_F	$I_F = 1mA$		715	mV
		$I_F = 10mA$		855	mV
		$I_F = 50mA$		1000	mV
		$I_F = 150mA$		1200	mV
Reverse Current	I_R	$V_R = 80V$		0.5	μA
		$V_R = 25V$		30	nA
Capacitance	C_T	$V_R = 0V, f = 1MHz$		2.0	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		4.0	ns

RATING AND CHARACTERISTICS CURVES



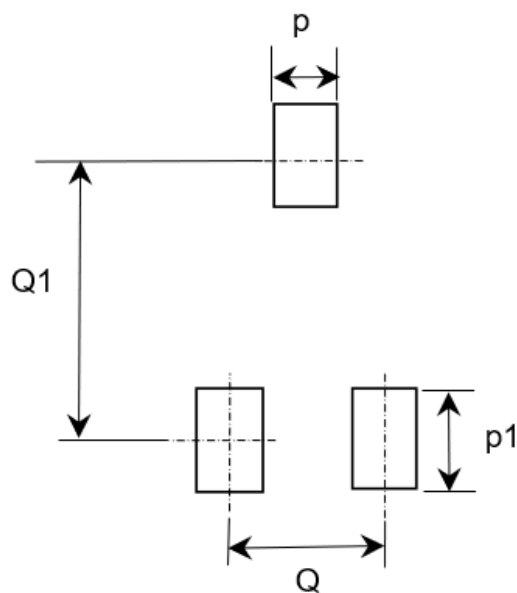
PACKAGE OUTLINE DIMENSIONS

SOT-323



Symbol	MIN	MAX
A	0.90	1.00
A1	0.00	0.10
A2	0.90	1.00
b	0.20	0.40
c	0.08	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.45
e	0.65TYP	
e1	1.20	1.40
L	0.525REF	
L1	0.26	0.46
e	0°	8°
Unit: mm		

SUGGESTED PAD LAYOUT

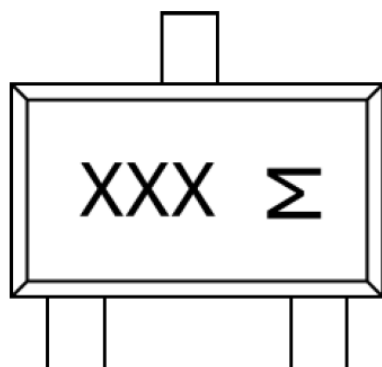


Land Pattern Recommendation

Symbol	Type
Q1	2.2
Q	1.3
p	0.5
p1	0.8
Unit: mm	

DEVICE MARKING CODE AND ORDERING INFORMATION

DEVICE	Marking	Quantity	Packing
1SS181W	A3	3000/7"Reel	Tape & Reel



XXX: Product Marking Code

Σ : Date Code (Rotate 90° counterclockwise)

Odd Year	Even Year
1	E
2	F
3	H
4	J
5	K
6	L
7	N
8	P
9	U
T	X
V	Y
C	Z

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