



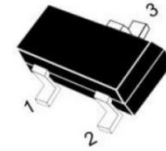
SSCSBAW56S6 /SSCSBAV70S6/ SSCSBAV99S6

Fast Switching Diode

● Features

- ✧ Fast Switching Speed
- ✧ Ultra-Small Surface Mount Package
- ✧ Low Reverse Leakage Current
- ✧ Ideal for Battery Powered Portable Applications
- ✧ RoHS Compliant/Green EMC
- ✧ Moisture Sensitivity: Level 3 per J-STD-020

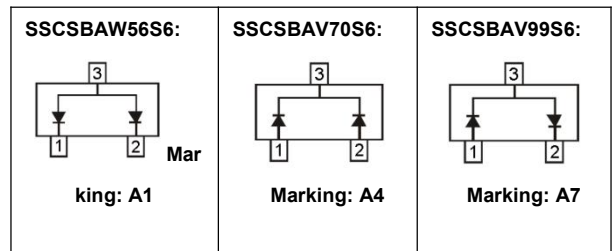
● PIN configuration



SOT-23

✧ Applications

- ✧ High speed switching for detection
- ✧ Battery Powered Portable
- ✧ Mobile phones, laptops and other electronic devices



Circuit Diagram

● Absolute maximum rating @T_A=25°C

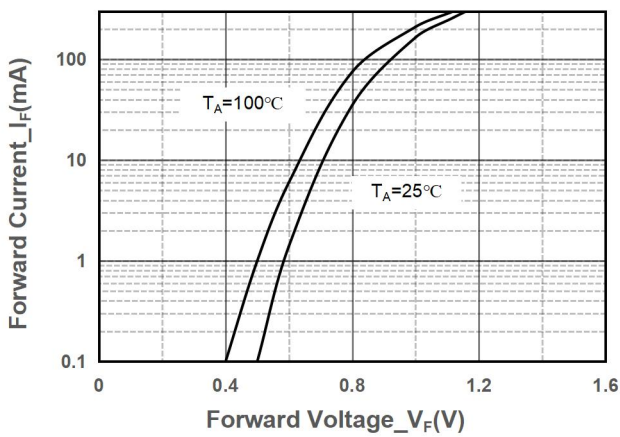
Parameter	Symbol	Value	Unit
Reverse Voltage (DC)	V _R	100	V
Average Rectified Forward Current	I _{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _D	225	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	556	°C/W
Junction Temperature	T _J	125	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C



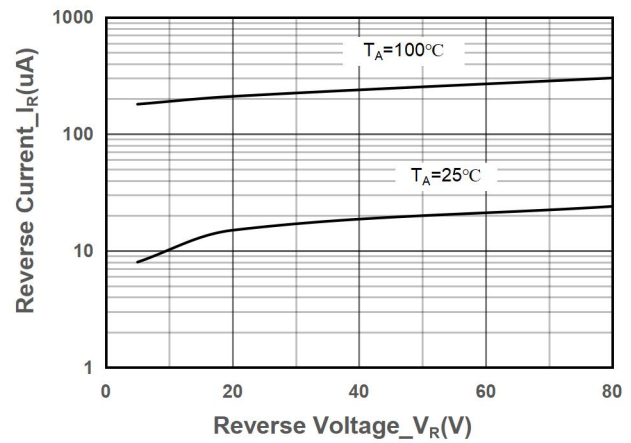
● **Electrical Characteristics @T_A = 25°C**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V _R	I _R = 100uA	100			V
Forward Voltage	V _F	I _F = 1mA			0.715	V
		I _F = 10mA			0.855	V
		I _F = 50mA			1	V
		I _F = 150mA			1.25	V
Reverse Current	I _R	V _R = 70V			2.5	μA
Capacitance between terminals	C _T	V _R = 0V, f = 1MHz			1.5	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA,R _L =100Ω,I _{rr} =0.1I _R			6	ns

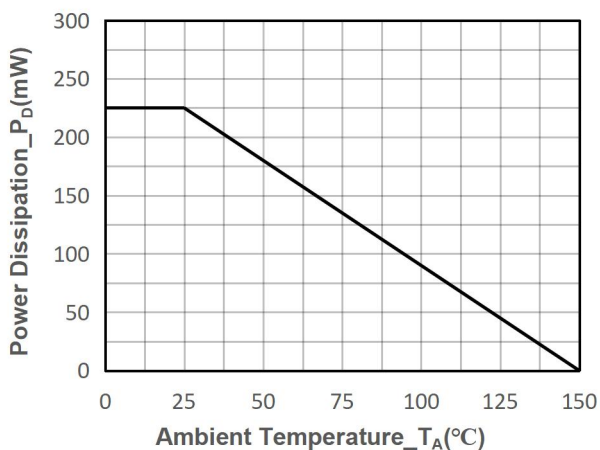
● **Typical Performance Characteristics**



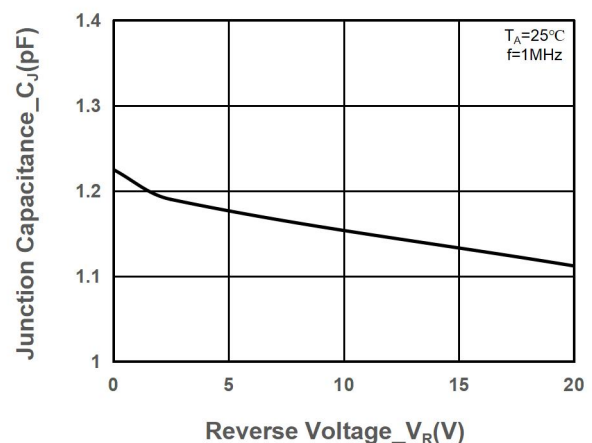
Forward Current vs. Forward Voltage



Reverse Current vs. Reverse Voltage



Power Derating vs. Ambient Temperature



Junction Capacitance vs. Reverse Voltage



● Package Information

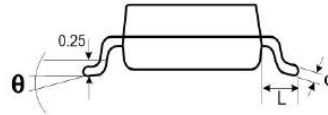
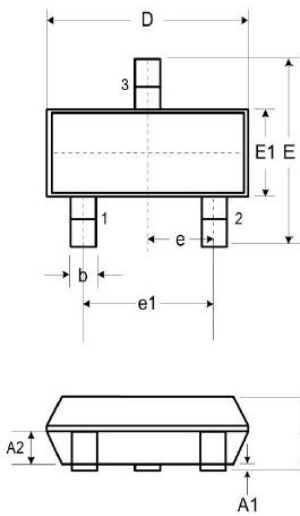
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAW56S6	SOT-23	A1	3000	7 Inch
SSCSBAV70S6	SOT-23	A4	3000	7 Inch
SSCSBAV99S6	SOT-23	A7	3000	7 Inch

Mechanical Data

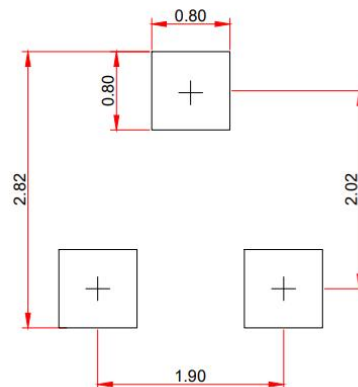
Case: SOT-23

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters		
	Min.	Typ.	Max.
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.51
c	0.08	-	0.18
D	2.80	2.90	3.04
E	2.10	2.37	2.64
E1	1.20	1.30	1.40
e	0.95		
e1	1.90		
L	0.40	0.50	0.60
L1	0.55		
N	3		
θ	0°	-	8°

Recommended Pad outline (Unit: mm)





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