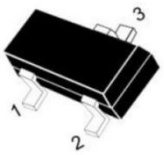
SSCSBAW56/70/99S6 Series

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

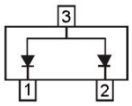
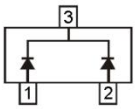
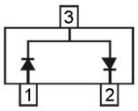
● PIN configuration



SOT-23

✧ Applications

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

SSCSBAW56S6:	SSCSBAV70S6:	SSCSBAV99S6:
 Marking:A1	 Marking:A4	 Marking:A7

Circuit Diagram

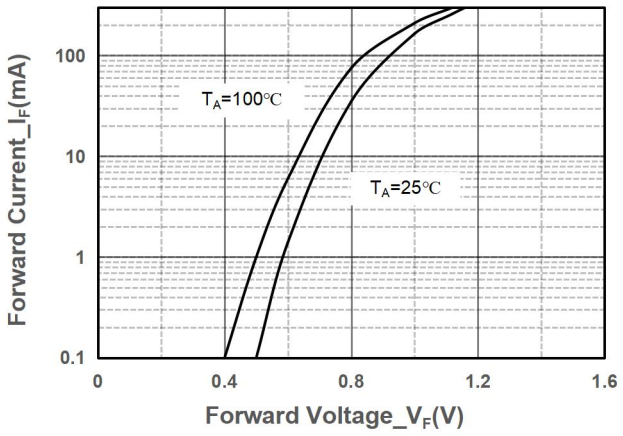
● Absolute maximum rating @T_A=25℃

Parameter	Symbol	Value	Unit
Reverse Voltage(DC)	V_R	70	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	$R_{\theta JA}$	556	℃/W
Junction Temperature	T_J	125	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

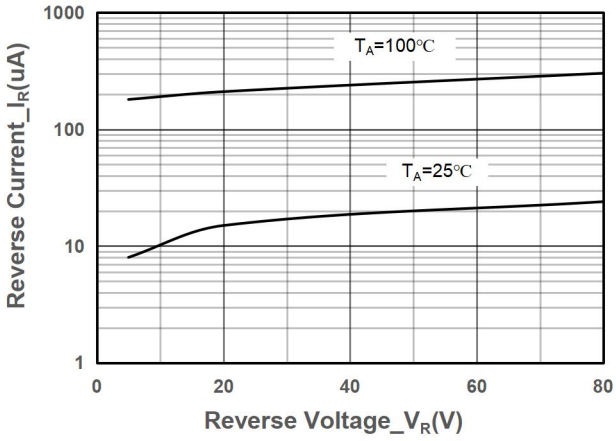
Electrical Characteristics @T_A=25℃

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V_R	I_R = 100uA	70			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

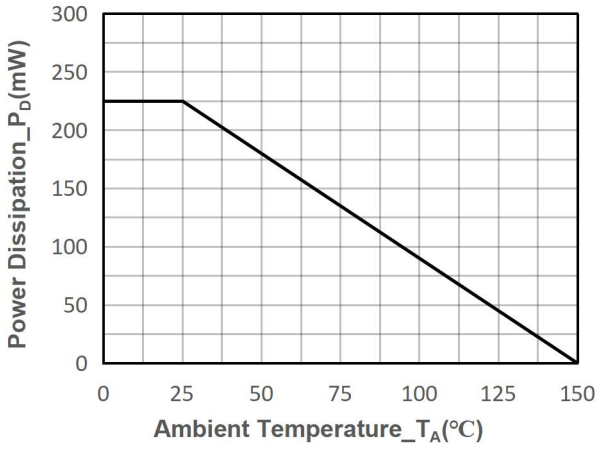
Typical Performance Characteristics



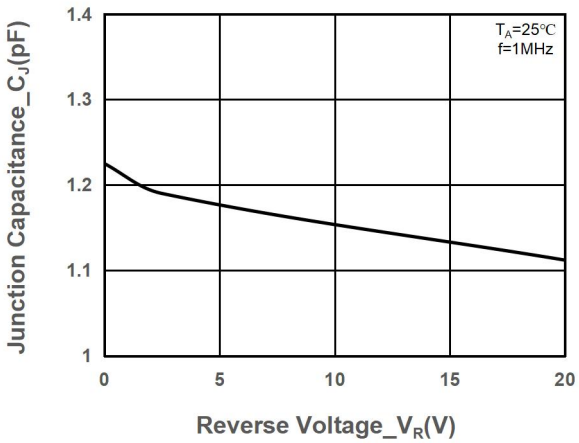
Forward Current vs. Forward Voltage



Reverse Current vs. Reverse Voltage



Power Derating vs. Ambient Temperature



Junction Capacitance vs. Reverse Voltage

● Package Information

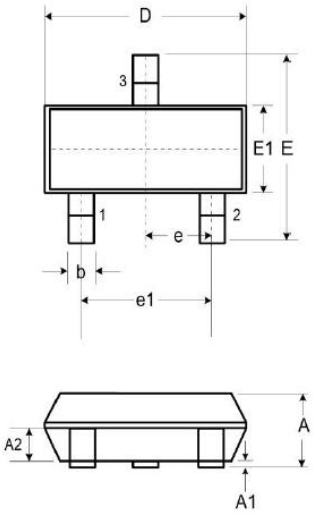
Ordering Information

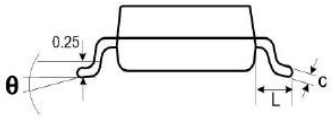
Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAW56S6	SOT-23	A1	3000	7 Inch
SSCSBAV70S6	SOT-23	A4	3000	7 Inch
SSCSBAV99S6	SOT-23	A7	3000	7 Inch

Mechanical Data

Case: SOT-23

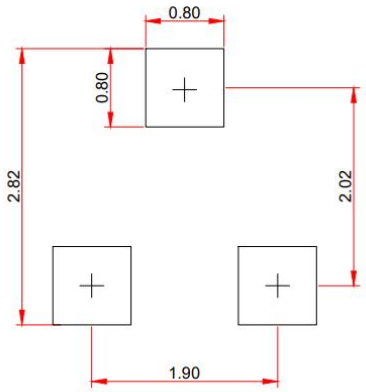
Case Material: Molded Plastic. UL Flammability





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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