



SSCS4148AS6/SSCS4148CAS6 SSCS4148CCS6/SSCS4148SES6

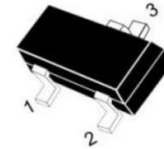
SSCS4148AS6 /SSCS4148CAS6 SSCS4148CCS6/SSCS4148SES6

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

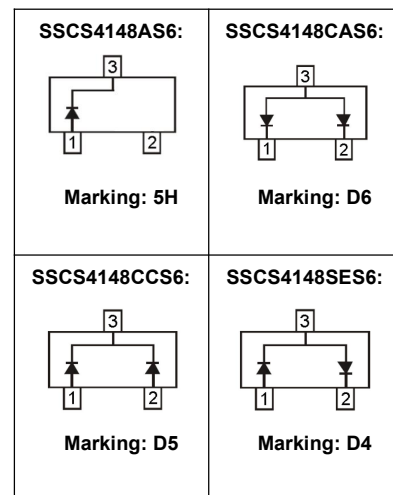
● PIN configuration



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

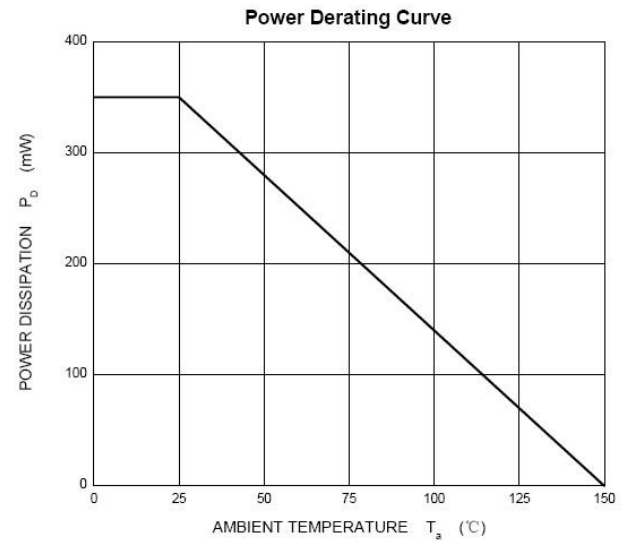
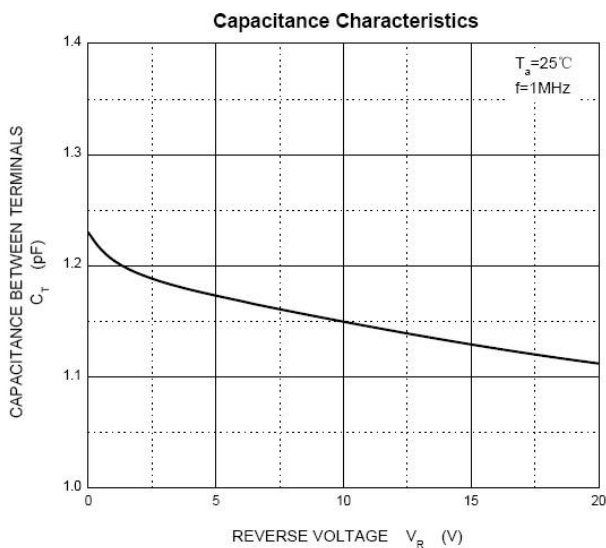
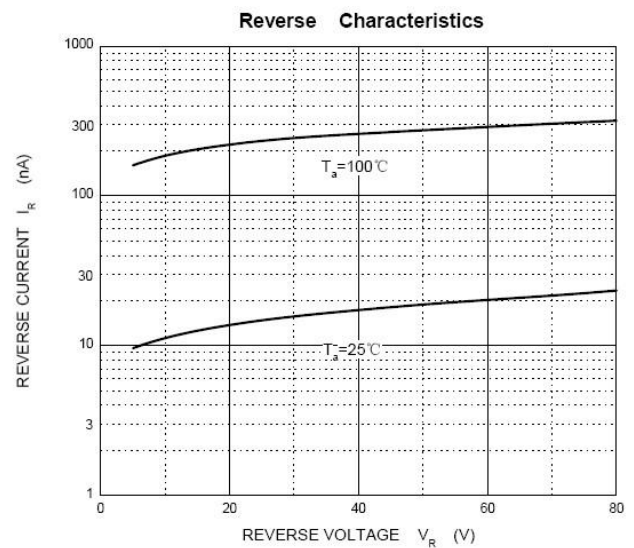
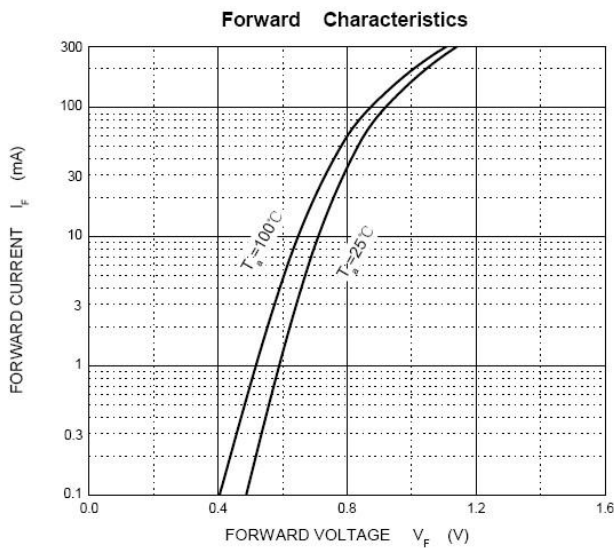
Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V _R	75	V
Peak Repetitive Reverse Voltage	V _{RM}	100	V
Average Rectified Forward Current	I _O	200	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _D	350	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	357	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C



● **Electrical Characteristics @ $T_A=25^\circ\text{C}$**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V_{BR}	$I_R = 100\mu\text{A}$	75			V
Reverse Current	I_R	$V_R = 75\text{V}$			5.0	μA
		$V_R = 25\text{V}$			25	μA
Forward Voltage	V_F	$I_F=10\text{mA}$			1.0	V
Capacitance between terminals	C_T	$V_R = 0\text{V}, f = 1\text{MHz}$			4	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, R_L=100\Omega, I_{rr}=0.1I_R$			4	ns

● **Typical Performance Characteristics**





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● Package Information

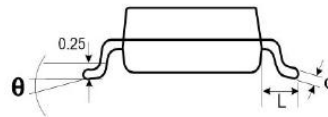
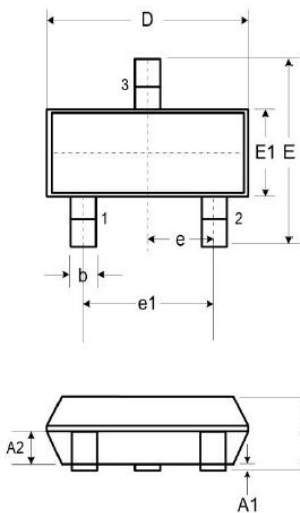
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCS4148AS6	SOT-23	5H	3000	7 Inch
SSCS4148CAS6	SOT-23	D6	3000	7 Inch
SSCS4148CCS6	SOT-23	D5	3000	7 Inch
SSCS4148SES6	SOT-23	D4	3000	7 Inch

Mechanical Data

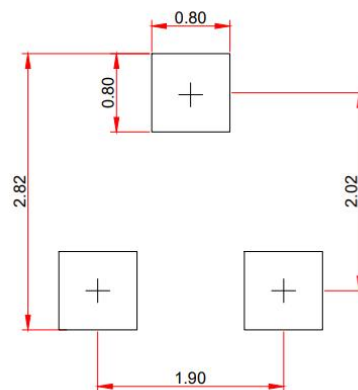
Case: SOT-23

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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