



SSCS4148AS6/SSCS4148CAS6 SSCS4148CCS6/SSCS4148SES6

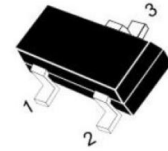
SSCS4148AS6 /SSCS4148CAS6 SSCS4148CCS6/SSCS4148SES6

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

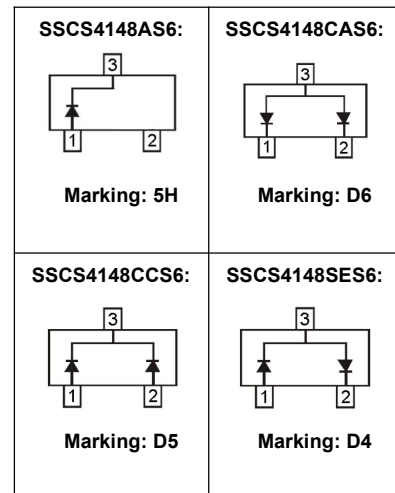
● PIN configuration



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

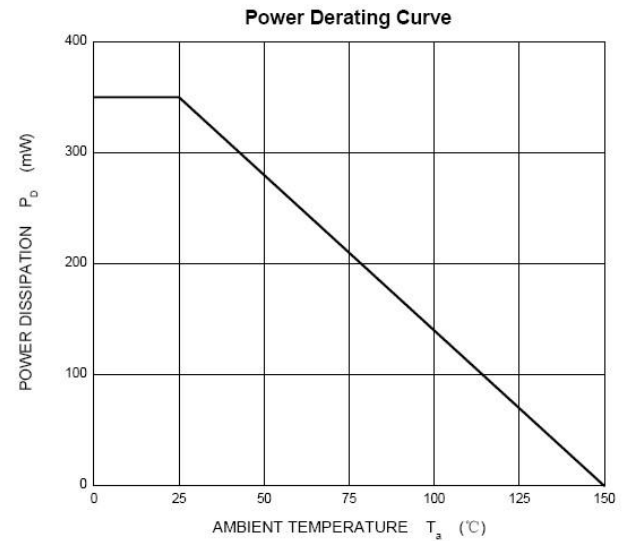
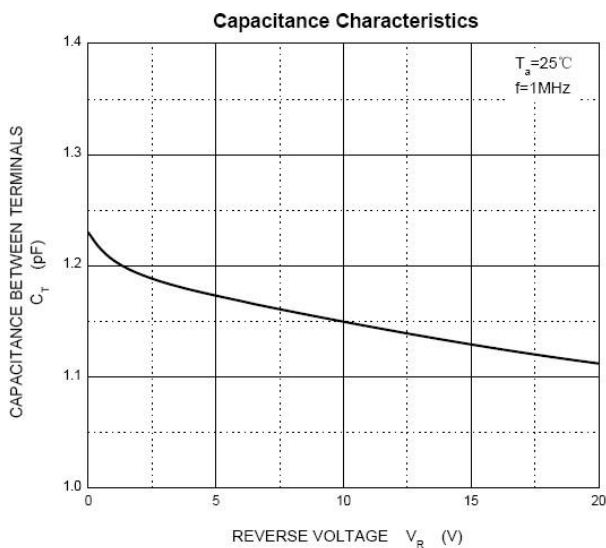
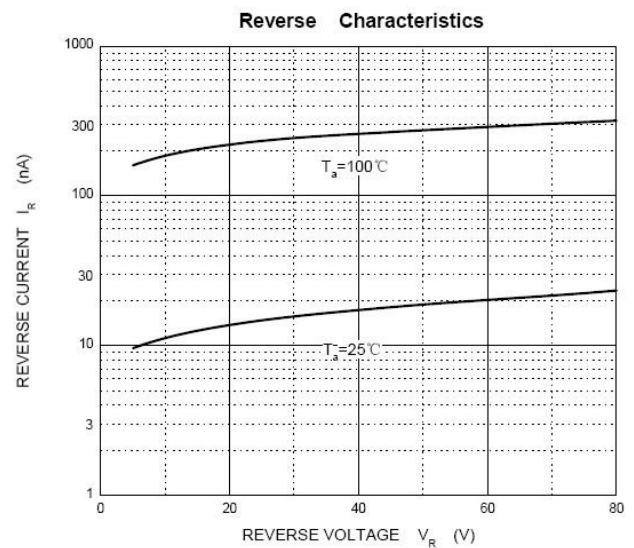
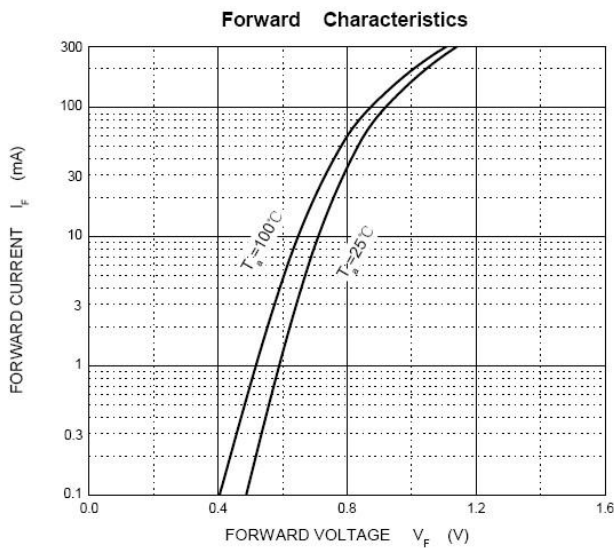
| Parameter | Symbol | Value | Unit |
|---|------------------|------------|------|
| Continuous Reverse Voltage | V _R | 75 | V |
| Peak Repetitive Reverse Voltage | V _{RM} | 100 | V |
| Average Rectified Forward Current | I _O | 200 | mA |
| Non-repetitive Peak Forward Surge Current @ t=8.3ms | I _{FSM} | 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°C**

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-------------------------------|-----------------|--|------|------|------|------|
| Reverse Voltage | V _{BR} | I _R = 100uA | 75 | | | V |
| Reverse Current | I _R | V _R = 75V | | | 5.0 | μA |
| | | V _R = 25V | | | 25 | μA |
| Forward Voltage | V _F | I _F =10mA | | | 1.0 | V |
| Capacitance between terminals | C _T | V _R = 0V, f = 1MHz | | | 4 | pF |
| Reverse recovery time | t _{rr} | I _F =I _R =10mA, R _L =100Ω, I _{rr} =0.1I _R | | | 4 | ns |

● **Typical Performance Characteristics**





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● Package Information

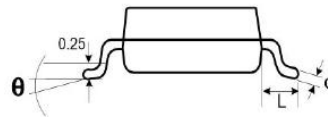
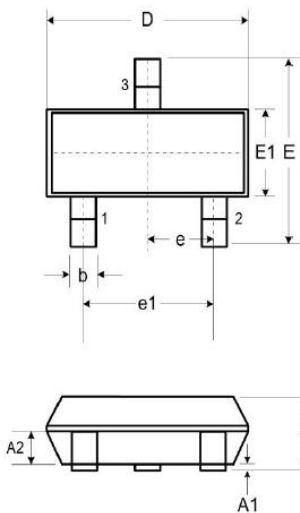
Ordering Information

| 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

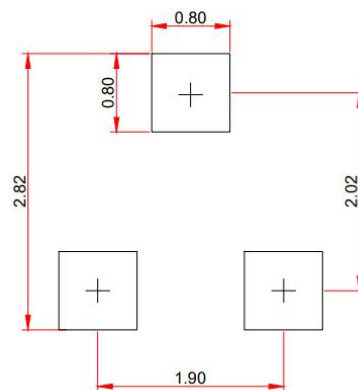
Case: SOT-23

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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