



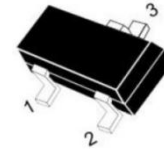
**SSCSBAV23AS6 /SSCSBAV23CS6
/SSCSBAV23SS6**

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

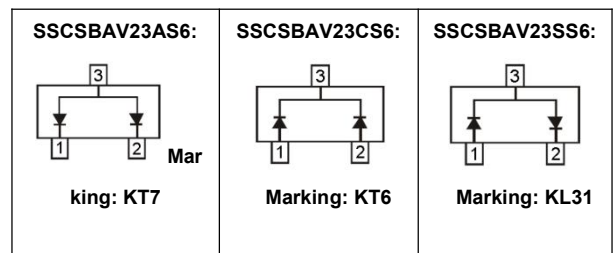
● **PIN configuration**



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 |
|---|---------------------|------------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 250 | V |
| Working Peak Reverse Voltage | V _{RWM} | 250 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 175 | V |
| Average Rectified Forward Current | I _{FM} | 225 | mA |
| Non-repetitive Peak Forward Surge Current @ t=8.3ms | I _{FSM} | 1.7 | A |
| Power Dissipation | P _D | 350 | mW |
| Thermal Resistance from Junction to Ambient | R _{θJA} | 357 | °C/W |
| Junction Temperature | T _J | 125 | °C |
| Storage Temperature | T _{STG} | -55 ~ +150 | °C |

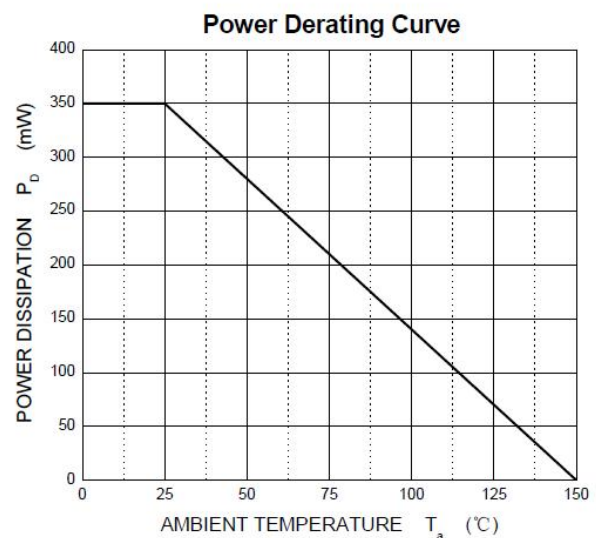
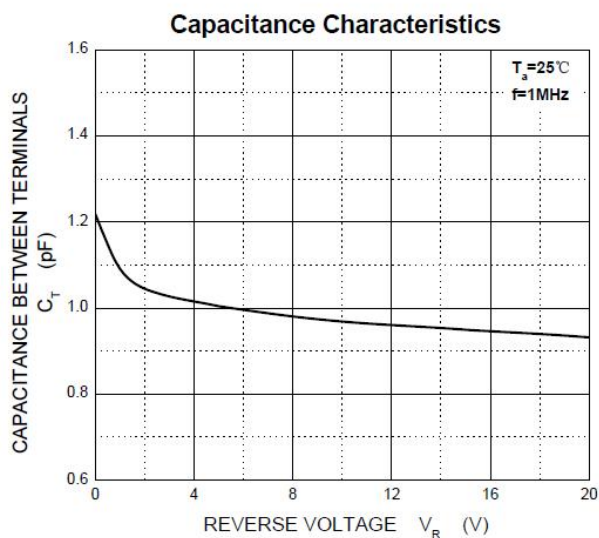
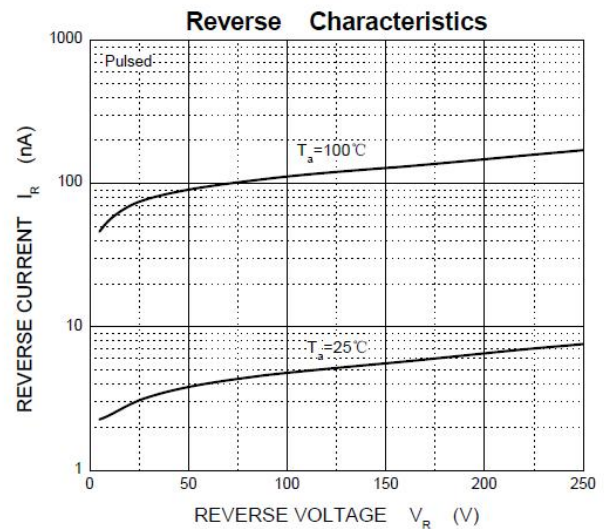
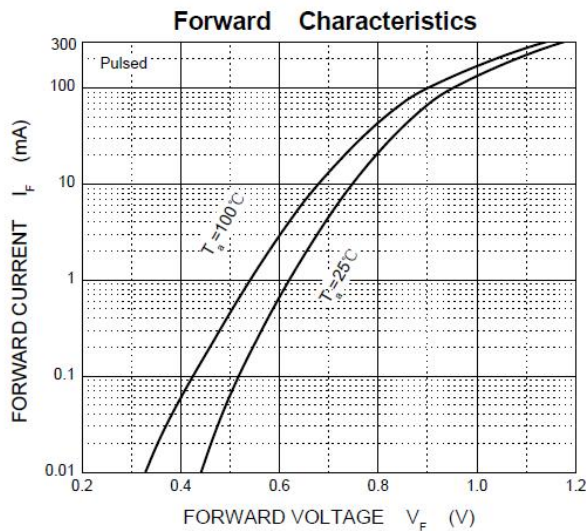


SSCSBAV23AS6/SSCSBAV23CS6 /SSCSBAV23SS6

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

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-------------------------------|----------|---|------|------|------|---------------|
| Reverse Voltage | V_R | $I_R = 100\mu\text{A}$ | 250 | | | V |
| Forward Voltage | V_F | $I_F = 100\text{mA}$ | | | 1 | V |
| | | $I_F = 200\text{mA}$ | | | 1.25 | V |
| Reverse Current | I_R | $V_R = 250\text{V}$ | | | 0.1 | μA |
| Capacitance between terminals | C_T | $V_R = 0\text{V}, f = 1\text{MHz}$ | | | 5 | pF |
| Reverse recovery time | t_{rr} | $I_F = I_R = 30\text{mA}, R_L = 100\Omega, I_{rr} = 0.1I_R$ | | | 50 | ns |

● Typical Performance Characteristics





SSCSBAV23AS6/SSCSBAV23CS6 /SSCSBAV23SS6

● Package Information

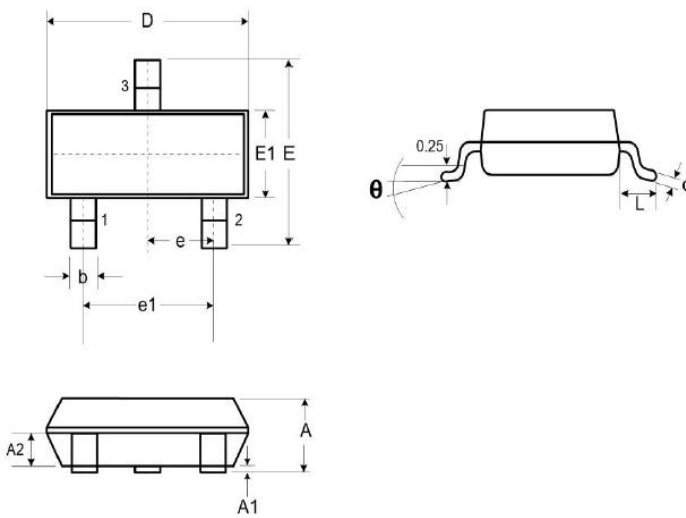
Ordering Information

| Device | Package | Marking | Qty per Reel | Reel Size |
|--------------|---------|---------|--------------|-----------|
| SSCSBAV23AS6 | SOT-23 | KT7 | 3000 | 7 Inch |
| SSCSBAV23CS6 | SOT-23 | KT6 | 3000 | 7 Inch |
| SSCSBAV23SS6 | SOT-23 | KL31 | 3000 | 7 Inch |

Mechanical Data

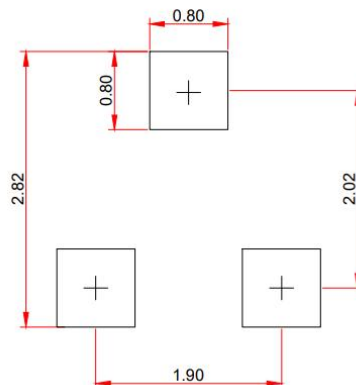
Case: SOT-23

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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