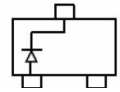


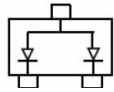
CSD54AS23 SCHOTTKY BARRIER DIODE

FEATURES

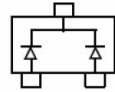
- Extremely Fast Switching Speed



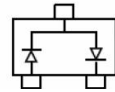
CSD54 MARKING: KL1



CSD54A MARKING: KL2

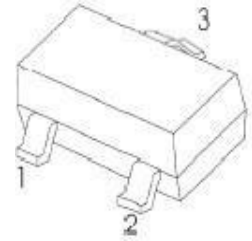


CSD54C MARKING: KL3



CSD54S MARKING: KL4

SOT-23



MARKING:

| CSD54S23 | CSD54AS23 | CSD54CS23 | CSD54SS23 |
|----------|-----------|-----------|-----------|
| | | | |

Solid dot = Green molding compound device, if none, the normal device.

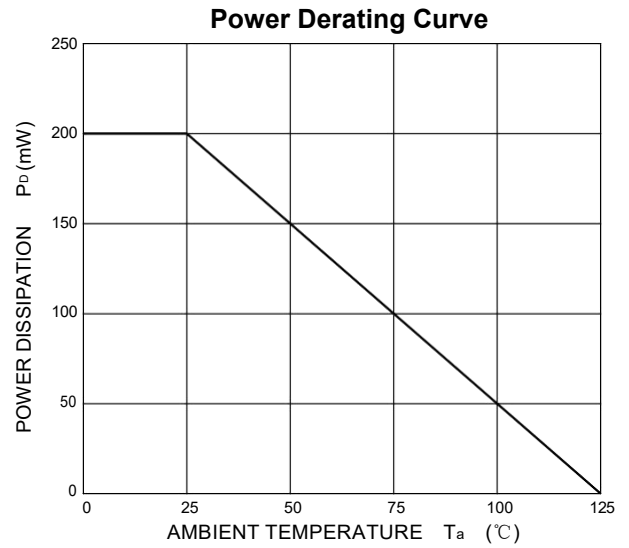
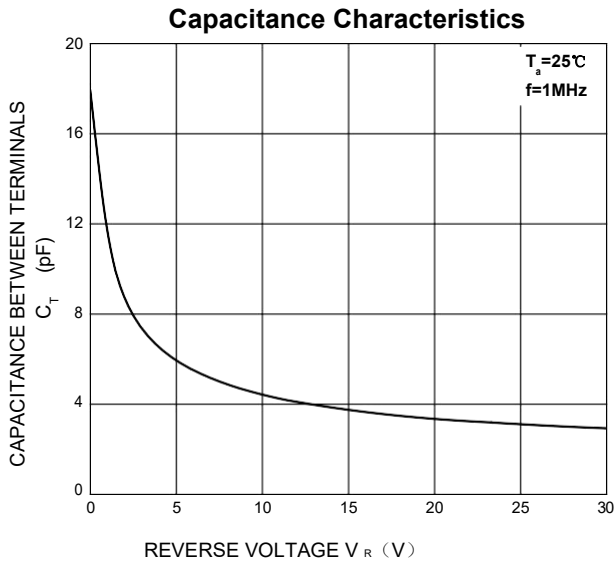
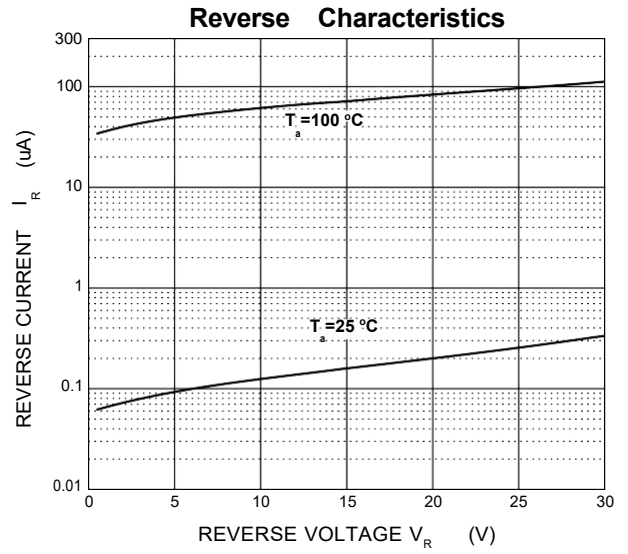
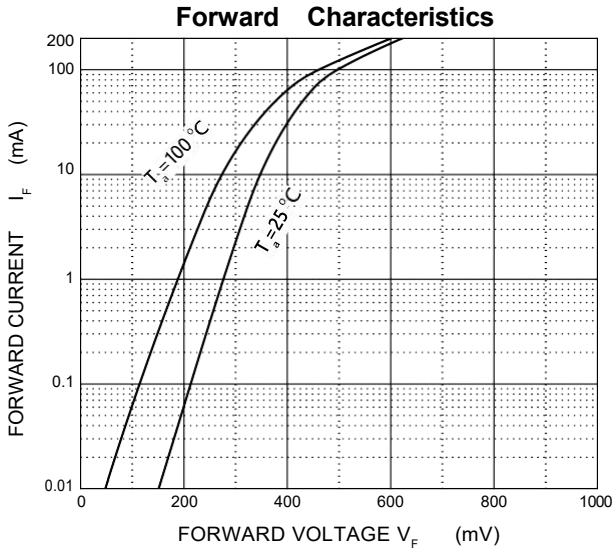
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|-----------------|----------|---------------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 30 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Forward Continuous Current | I_{FM} | 200 | mA |
| Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | I_{FSM} | 600 | mA |
| Repetitive Peak Forward Current @ $t \leq 1\text{s}, \delta \leq 0.5$ | I_{FRM} | 300 | mA |
| Power Dissipation | P_D | 200 | mW |
| Thermal Resistance from Junction to Ambient | $R_{\theta JA}$ | 500 | $^\circ\text{C}/\text{W}$ |
| Junction Temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55~+150 | $^\circ\text{C}$ |

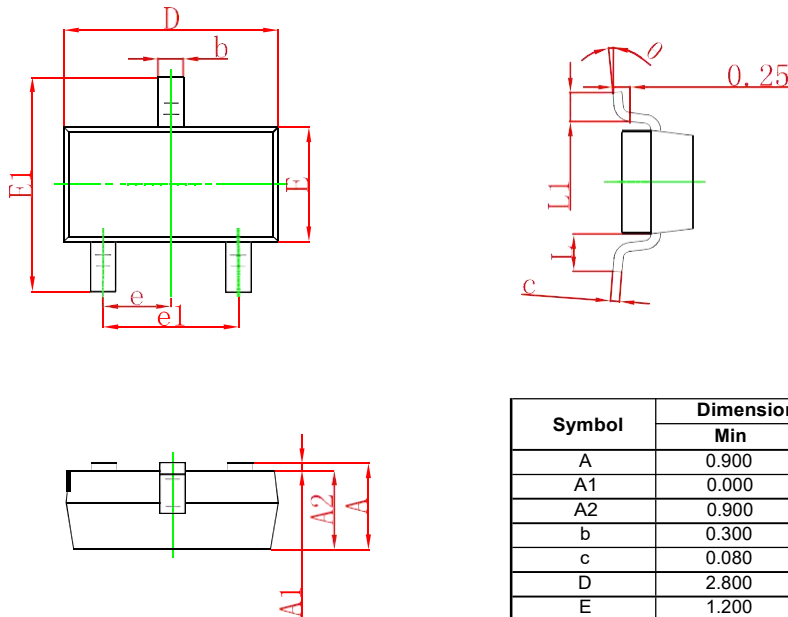
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Min | Typ | Max | Unit | Test conditions |
|-----------------------|------------|-----|-----|------|---------------|--|
| Reverse voltage | $V_{(BR)}$ | 30 | | | V | $I_R=100\mu\text{A}$ |
| Forward voltage | V_F | | | 0.24 | V | $I_{F1}=0.1\text{mA}$ |
| | | | | 0.32 | V | $I_{F2}=1\text{mA}$ |
| | | | | 0.40 | V | $I_{F3}=10\text{mA}$ |
| | | | | 0.50 | V | $I_{F4}=30\text{mA}$ |
| | | | | | 1 | V |
| Reverse current | I_R | | | 2 | μA | $V_R=25\text{V}$ |
| Diode capacitance | C_D | | | 10 | pF | $V_R=1\text{V}, f=1\text{MHz}$ |
| Reverse recovery time | t_{rr} | | | 5 | ns | $I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100 \Omega$ |

Typical Characteristics

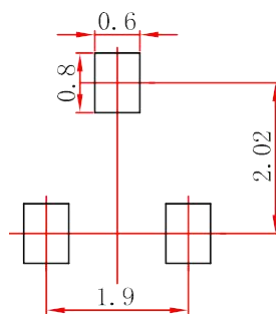


SOT-23 Dimensions Size:



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.900 | 1.150 | 0.035 | 0.045 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.050 | 0.035 | 0.041 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 2.800 | 3.000 | 0.110 | 0.118 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| E1 | 2.250 | 2.550 | 0.089 | 0.100 |
| e | 0.950 TYP | | 0.037 TYP | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.550 REF | | 0.022 REF | |
| L1 | 0.300 | 0.500 | 0.012 | 0.020 |
| θ | 0° | 8° | 0° | 8° |

SOT-23 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

Order Information

| P/N | Material | Type | Reel Size | MOQ |
|-----------|----------|------|-----------|-----|
| CSD54AS23 | Green | T/R | 7 inch | 3K |

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