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| <p>NPN型 小功率 贴片三极管 NPN EPITAXIAL PLANAR TRANSISTOR SMD</p> | <p>S9014 对应其他工业型号 9014</p> |
| <ul style="list-style-type: none"> ■ Excellent hFE linearity ■ Low noise ■ Transistor Polarity: NPN ■ Transistor pinout: BEC ■ SOT-23 Package ■ Marking Code: J6 ■ hFE: 200~450, 450~1000 | |

| | | |
|--|--|---|
| <p style="text-align: center;">Inner circuit</p>  <p style="text-align: center;">SOT-23 内部结构</p> | <p style="text-align: center;">S9014</p>  <p style="text-align: center;">SOT-23 管脚排列</p> | <p style="text-align: center;">元件标识 (打印)</p>  <p style="text-align: center;">DEVICE MARKING</p> |
|--|--|---|

■ CLASSIFICATION OF hFE

| | | |
|-------|---------|----------|
| RANK | L | H |
| RANGE | 200~450 | 450~1000 |

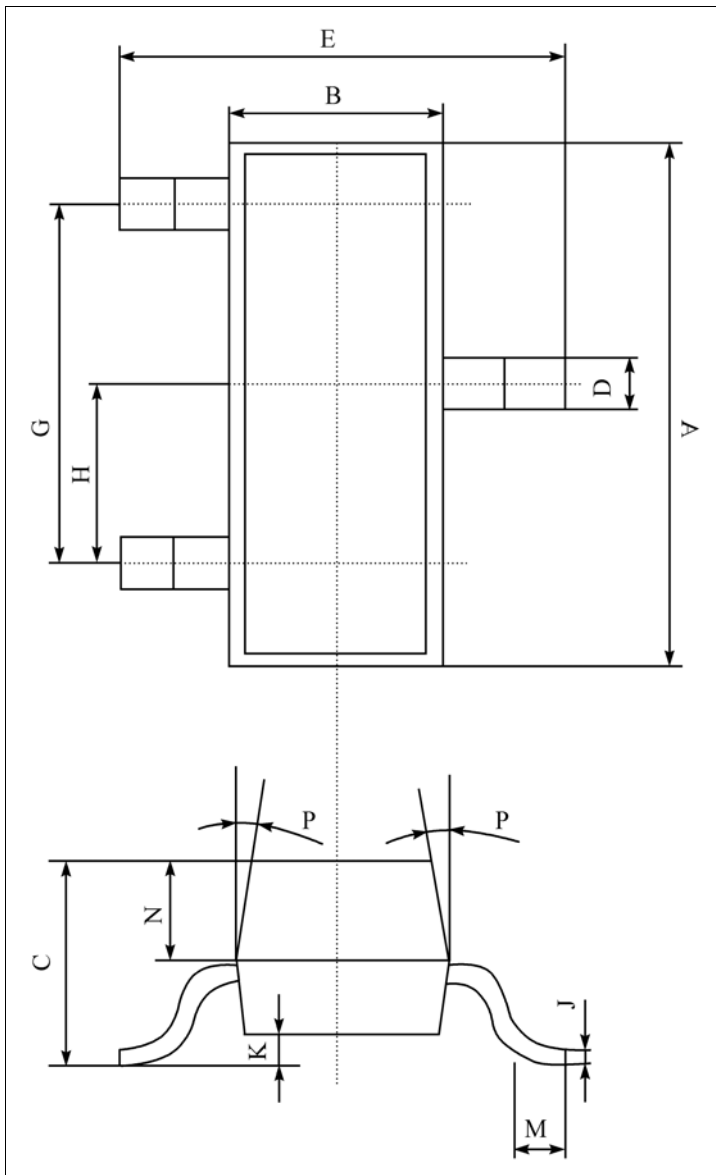
■ MAXIMUM RATINGS

| Symbol | Parameter | Value | Unit |
|----------------|--|----------|------|
| V_{CB0} | Collector-Base Voltage | 50 | V |
| V_{CEO} | Collector-Emitter Voltage | 45 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| I_c | Collector Current | 150 | mA |
| P_c | Collector Power Dissipation | 225 | mW |
| T_J, T_{stg} | Operation Junction and Storage Temperature Range | -55~+150 | °C |

■ ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

| Characteristic | Symbol | Test Condition | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--------------------------------------|-----|-----|------|---------------|
| Collector Cutoff Current | I_{CBO} | $I_E=0$ $V_{CB}=50V$ | -- | -- | 0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $I_C=0$ $V_{EB}=5V$ | -- | -- | 0.1 | μA |
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=100\mu\text{A}$ | 50 | -- | -- | V |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=1.0\text{mA}$ | 45 | -- | -- | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=100\mu\text{A}$ | 5 | -- | -- | V |
| DC Current Gain | hFE | $V_{CE}=5V$ $I_C=1\text{mA}$ | 200 | -- | 1000 | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=100\text{mA}$ $I_B=5\text{mA}$ | -- | -- | 0.3 | V |
| Base-Emitter Saturation | V_{BE} | $V_{CE}=5V$ $I_C=2\text{mA}$ | -- | -- | 0.7 | V |
| Transition Frequency | f_T | $V_{CE}=5V$ $I_C=10\text{mA}$ | 150 | | | MHz |
| Collector Output Capacitance | C_{OB} | $I_E=0$ $V_{CB}=10V$ $f=1\text{MHz}$ | -- | | 3.5 | pF |

■ DIMENSION



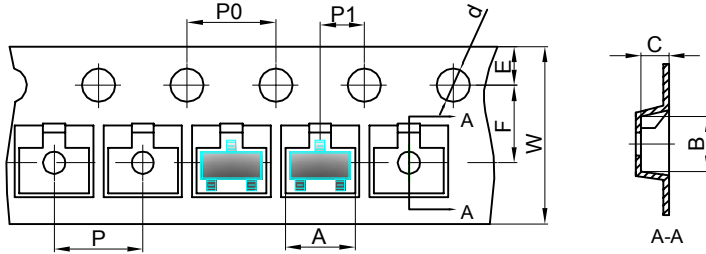
单位 (UNIT) : mm

| 序号 | 数值及公差 |
|----|-----------------|
| A | 2.90 ± 0.10 |
| B | 1.30 ± 0.10 |
| C | 1.00 ± 0.10 |
| D | 0.40 ± 0.10 |
| E | 2.40 ± 0.20 |
| G | 1.90 ± 0.10 |
| H | 0.95 ± 0.05 |
| J | 0.13 ± 0.05 |
| K | $0.00 - 0.10$ |
| M | ≥ 0.20 |
| N | 0.60 ± 0.10 |
| P | $7 \pm 2^\circ$ |

Packing
 SOT-23 包装规格
 SMD片式表面贴封装
 包装方式: 载带卷盘包装
 Tape & Reel, 3Kpcs/Reel
 每卷数量3000只 (3Kpcs/Reel)
 每盒数量45000只 (45Kpcs/BOX)
 每箱数量180000只 (180Kpcs/Cartons)

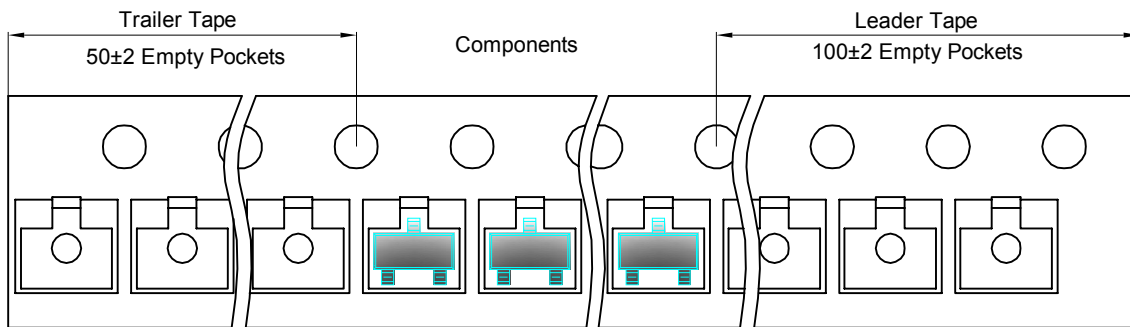
SOT-23 Tape and reel

SOT-23 Embossed Carrier Tape

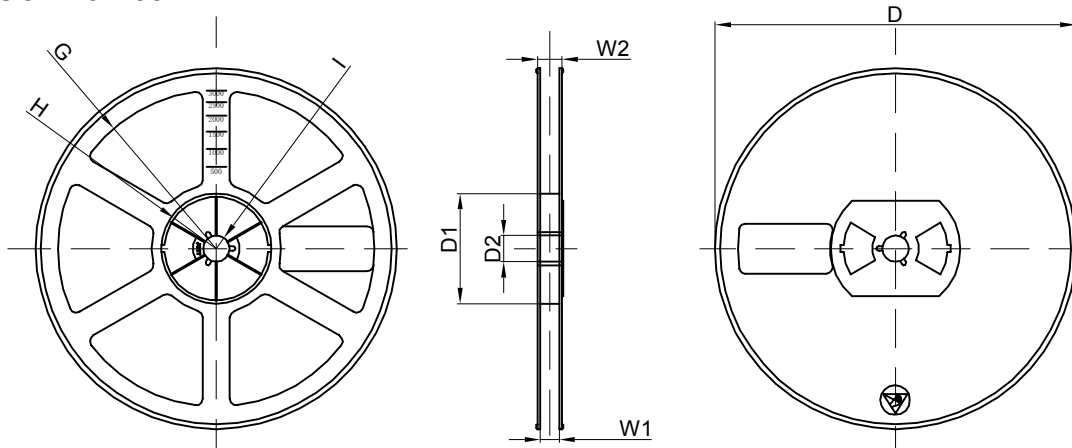


| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type | A | B | C | d | E | F | P0 | P | P1 | W |
| SOT-23 | 3.15 | 2.77 | 1.22 | Ø1.50 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

SOT-23 Tape Leader and Trailer



SOT-23 Reel



| Dimensions are in millimeter | | | | | | | | |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option | D | D1 | D2 | G | H | I | W1 | W2 |
| 7" Dia | Ø178.00 | 54.40 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 12.30 |

| REEL | Reel Size | Box | Box Size(mm) | Carton | Carton Size(mm) | G.W.(kg) |
|----------|-----------|------------|--------------|-------------|-----------------|----------|
| 3000 pcs | 7 inch | 45,000 pcs | 192×192×193 | 180,000 pcs | 404×404×214 | |