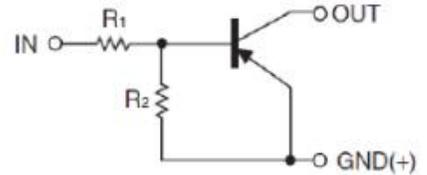


**SOT-23 Digital Transistor 数字晶体管**

■ **Features 特点**

1.IN 2.GND 3.OUT  
PNP With Bias Resistor Network  
带偏置电阻



■ **Absolute Maximum Ratings 最大额定值**

| Characteristic 特性参数                      | Symbol 符号              | Rat 额定值               | Unit 单位       |
|--|------------------------|-----------------------|---------------|
| Supply Voltage 电源电压                      | $V_{CC}$               | -50                   | V             |
| Input Voltage 输入电压                       | $V_{IN}$               | -40~+10               | V             |
| Output Current 输出电流                      | $I_O$                  | -100                  | mA            |
| Power dissipation 耗散功率                   | $P_C(T_a=25^{\circ}C)$ | 200                   | mW            |
| Thermal Resistance Junction-Ambient 热阻   | $R_{\theta JA}$        | 625                   | $^{\circ}C/W$ |
| Junction and Storage Temperature 结温和储藏温度 | $T_J, T_{stg}$         | -55to+150 $^{\circ}C$ |               |

■ **Device Marking 产品打标**

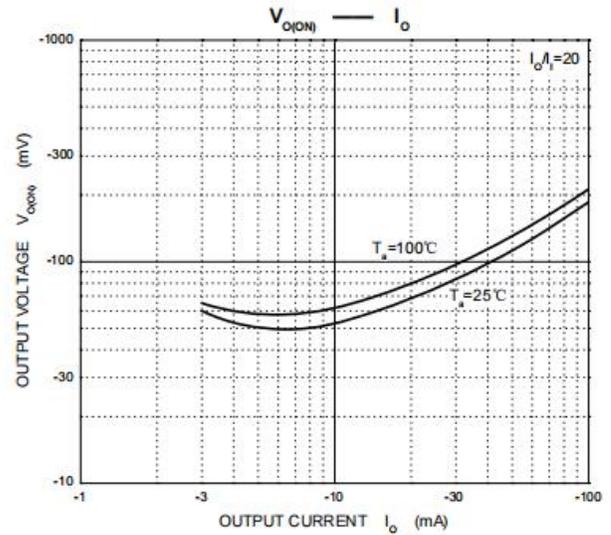
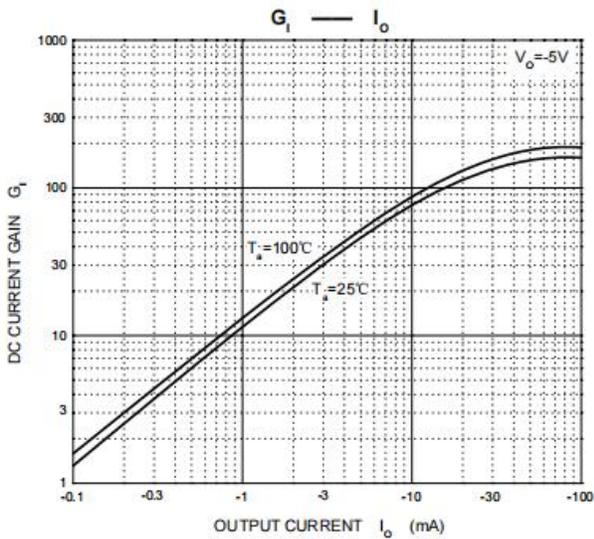
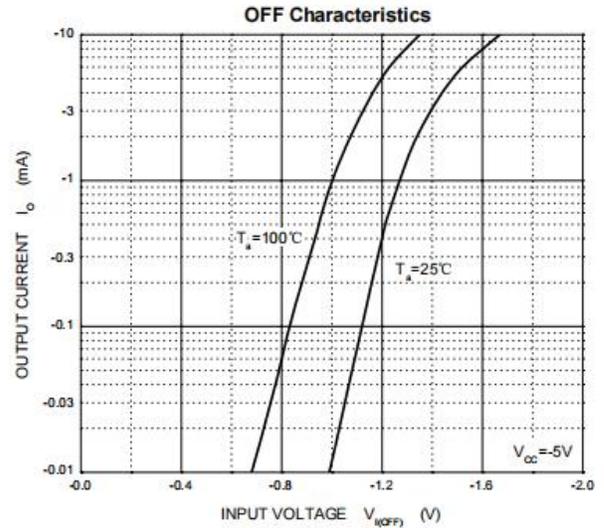
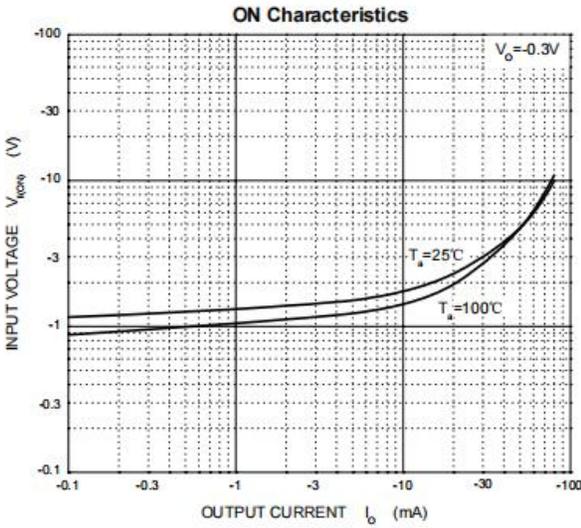
KRA103S=PC

■ Electrical Characteristics 电特性

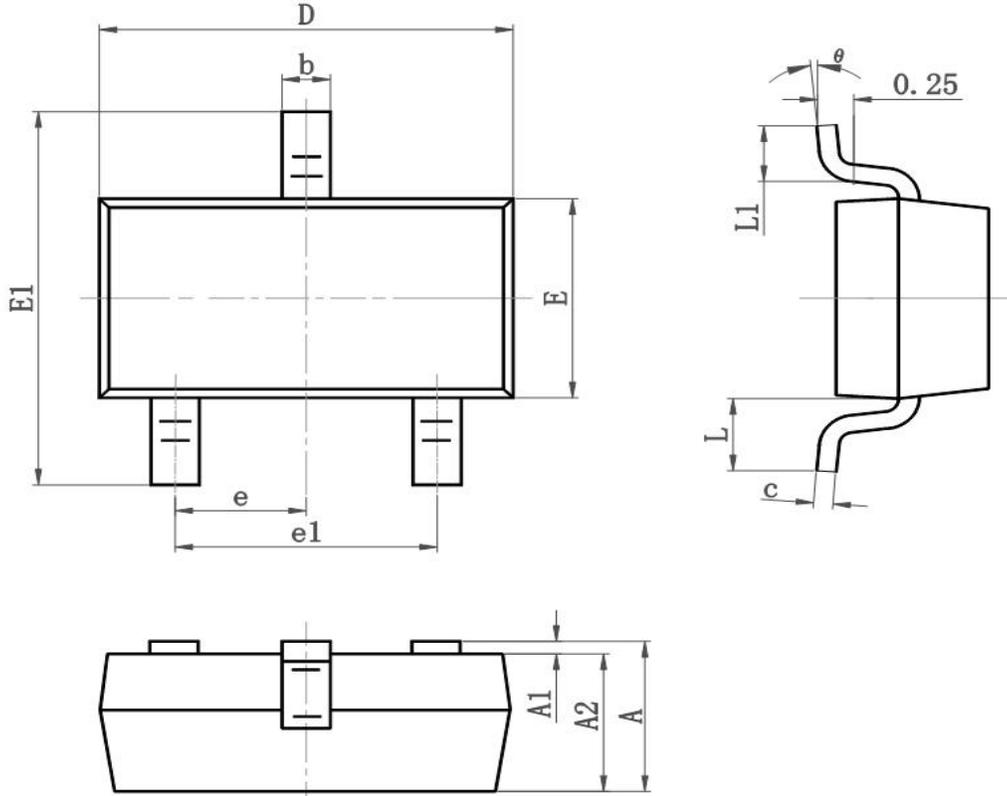
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

| Characteristic<br>特性参数  | Symbol<br>符号        | Min<br>最小值 | Type<br>典型值 | Max<br>最大值 | Unit<br>单位       |
|---|---------------------|------------|-------------|------------|------------------|
| Input Voltage 输入电压<br>( $V_{CC} = -5\text{V}$ , $I_O = -100\mu\text{A}$ )     | $V_{I(\text{off})}$ | -0.5       | —           | —          | V                |
| Input Voltage 输入电压<br>( $V_O = -0.3\text{V}$ , $I_O = -10\text{mA}$ )         | $V_{I(\text{on})}$  | —          | —           | -1.3       | V                |
| Output Voltage 输出电压<br>( $I_O/I_I = -10\text{mA}/-0.5\text{mA}$ )             | $V_{O(\text{on})}$  | —          | —           | -0.3       | V                |
| Input Current 输入电流<br>( $V_I = -5\text{V}$ )                                  | $I_I$               | —          | —           | -0.36      | mA               |
| Output Current 输出电流<br>( $V_{CC} = -50\text{V}$ , $V_I = 0$ )                 | $I_{O(\text{off})}$ | —          | —           | -0.5       | $\mu\text{A}$    |
| DC Current Gain<br>直流电流增益<br>( $V_O = -5\text{V}$ , $I_O = -5\text{mA}$ )     | $G_I$               | 70         | —           | —          |                  |
| Input Resistor<br>输入电阻  | R1                  | 17.6       | 22          | 26.4       | $\text{K}\Omega$ |
| Resistor Ratio<br>电阻比率  | R2/R1               | 0.8        | 1           | 1.2        |                  |
| Transition frequency<br>特征频率<br>( $V_O = -10\text{V}$ , $I_O = -5\text{mA}$ ) | $f_T$               | —          | 250         | —          | MHz              |

■ Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



| 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 | 0.050                | 0.055 |
| E1     | 2.250                     | 2.550 | 0.089                | 0.100 |
| e      | 0.900                     | 1.00  | 0.035                | 0.039 |
| e1     | 1.800                     | 2.000 | 0.071                | 0.079 |
| L      | 0.500                     | 0.600 | 0.020                | 0.024 |
| L1     | 0.300                     | 0.500 | 0.012                | 0.020 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |