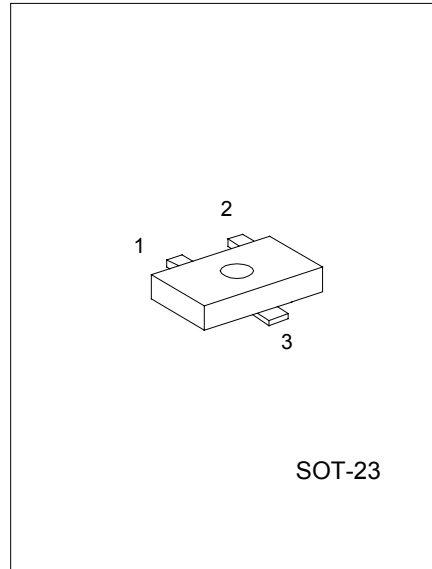


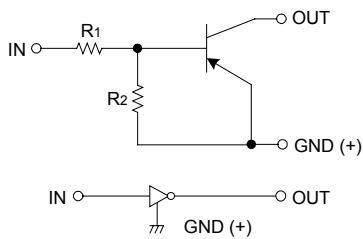
PNP DIGITAL TRANSISTOR
(BUILT-IN RESISTORS)

FEATURES

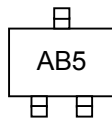
- *Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see the equivalent circuit).
- *The bias resistors consist of thin-film resistors with complete isolation to allow positive biasing of the input. They also have the advantage of almost completely eliminating parasitic effects.
- *Only the on / off conditions need to be set for operation, making device design easy.



EQUIVALENT CIRCUIT



MARKING



1: GND 2: IN 3: OUT

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|----------------------|---------------------|------------|------|
| Supply Voltage | V _{CC} | -50 | V |
| Input Voltage | V _{IN} | -40~+10 | V |
| Output Current | I _O | -20 | mA |
| | I _{C(max)} | -100 | |
| Power Dissipation | P _D | 200 | mW |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature | T _{STG} | -55 ~ +150 | °C |

ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|----------------------|--------------------------------|---|-----|------|-------|------|
| Input Voltage | V _{I(off)} | V _{CC} = -5V, I _O =-100 μA | | | -0.5 | V |
| | V _{I(ON)} | V _O = -0.3V, I _O = -1mA | -3 | | | |
| Output Voltage | V _{O(ON)} | I _O = -5mA, I _I = -0.25 mA | | -0.1 | -0.3 | V |
| Input Current | I _I | V _I = -5V | | | -0.15 | mA |
| Output Current | I _{O(off)} | V _{CC} = -50V, V _I =0V | | | -0.5 | μA |
| DC Current Gain | G _I | V _O = -5V, I _O = -5mA | 82 | | | |
| Input Resistance | R ₁ | | 70 | 100 | 130 | kΩ |
| Resistance Ratio | R ₂ /R ₁ | | 0.8 | 1 | 1.2 | |
| Transition Frequency | f _r | V _{CE} = -10 V, I _E = 5mA, f=100MHz * | | 250 | | MHz |

*Transition frequency of the device

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