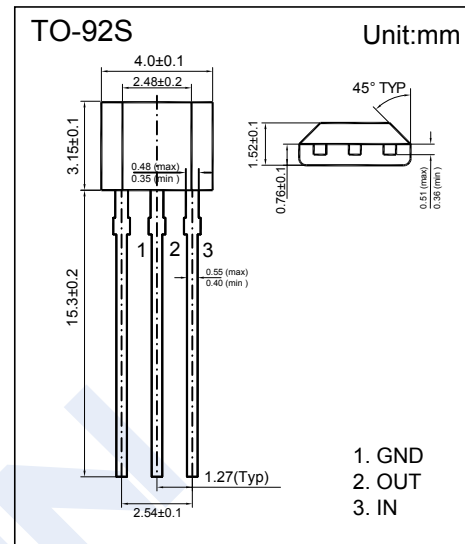
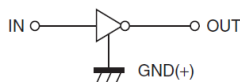
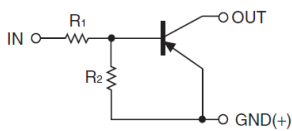


Digital Transistors

DTA124ESA (KDTA124ESA)

■ Features

- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors(see 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



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---------------------------|------------------|------------|------|
| Supply Voltage | V _{CC} | -50 | V |
| Input Voltage | V _{IN} | -40~+10 | |
| Output Current | I _o | -30 | mA |
| Peak Collector Current | I _{CM} | -100 | |
| Power Dissipation | P _D | 300 | mW |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature range | T _{stg} | -55 to 150 | |

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|----------------------|--------------------------------|---|------|-----|-------|------|
| Input voltage | V _{I(off)} | V _{CC} = -5 V , I _o =-100 uA | -0.5 | | | V |
| | V _{I(on)} | V _o = -0.2 V , I _o =-5 mA | | | -3 | |
| Output voltage | V _{O(on)} | I _o = -10 mA, I _I =-0.5 mA | | | -0.3 | |
| Input current | I _I | V _I = -5 V | | | -0.36 | mA |
| Output current | I _{o(off)} | V _{CC} = -50 V , V _I =0 | | | -0.5 | uA |
| DC current gain | G _I | V _o =-5V,I _o =-5mA | 56 | | | |
| Input resistance | R ₁ | | 15.4 | 22 | 28.6 | KΩ |
| Resistance ratio | R ₂ /R ₁ | | 0.8 | 1 | 1.2 | |
| Transition frequency | f _T | V _o = -10V, I _o = -5mA,f=100MHz | | 250 | | MHz |

Digital Transistors

DTA124ESA (KDTA124ESA)

■ Typical Characteristics

