# MICRO ELECTRONICS

**2N5249**

**NPN SILICON TRANSISTOR**

## DESCRIPTION

2N5249 is NPN silicon planar transistor designed for AF small signal amplifier stages.

TO-92B

ECB

## ABSOLUTE MAXIMUM RATINGS

| | | |
|---|---|---|
| Collector-Emitter Voltage | VCEO | 50V |
| Collector-Base Voltage | VCBO | 70V |
| Emitter-Base Voltage | VEBO | 5V |
| Collector Current | IC | 100mA |
| Continuous Power Dissipation | Pd | 330mW |
| Operating & Storage Junction Temperature | Tj,Tstg | -55 to +150°C |

## ELECTRO-OPTICAL CHARACTERISTICS (Ta=25°C)

| PARAMETER | SYMBOL | MIN | MAX | UNIT | CONDITIONS | |
|---|---|---|---|---|---|---|
| Collector-Emitter Breakdown Voltage | LVCEO | 50 | | V | IC=1mA | IB=0 |
| Collector-Base Breakdown Voltage | BVCBO | 70 | | V | IC=10μA | IE=0 |
| Emtter-Base Breakdown Voltage | BVEBO | 5 | | V | IE=10μA | IC=0 |
| Collector Cutoff Current | ICBO | | 30 | nA | VCB=50V | IE=0 |
| Collector Cutoff Current | ICES | | 30 | nA | VCE=50V | VEB=0 |
| Emitter Cutoff Current | IEBO | | 50 | nA | VEB=5V | IC=0 |
| D.C. Current Gain | HFE | 40 | 800 | | IC=2mA | VCE=5V |
| | | 150 | | | IC=0.1mA | VCE=5V |
| Collector-Emitter Saturation Voltage | VCE(sat) | | 0.125 | V | IC=10mA | IB=1mA |
| | | | 0.78 | V | IC=10mA | IB=1mA |
| Base-Emitter Voltage | VBE | | 0.9 | V | IC=2mA | VCE=10V |
| Output Capacitance | Cob | | 4 | pF | VCB=10V | f=1MHz |
| Noise Figure | NF | | 3 | dB | IC=0.1mA | VCE=5V |
| | | | | | REB=5Kohm | |

* Pulse test : pulse width <300μS, duty cycle < 2%.

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