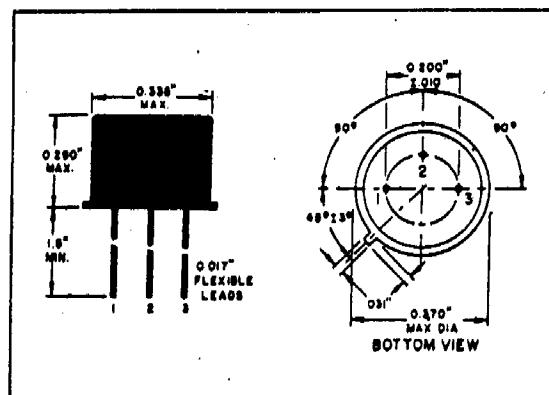


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2N1034 2N1035
2N1036 2N1037



MECHANICAL DATA

CASE: TERMINAL CONNECTIONS:

JEDEC TO-5

Lead 1 Emitter Lead 2 Base

Lead 3 Collector (All leads isolated from case)

ELECTRICAL DATA

ABSOLUTE MAXIMUM RATINGS:

| | 2N1034 | 2N1035 | 2N1036 | 2N1037 | |
|--|--------|--------|--------|--------|-----------------|
| Collector to Base Voltage V_{CBO} | -50 | -50 | -50 | -50 | volts |
| Collector to Emitter Voltage V_{CEO} | -40 | -35 | -30 | -35 | volts |
| Emitter to Base Voltage V_{EBO} | -20 | -20 | -20 | -20 | volts |
| Total Device Dissipation | | | | | |
| @ Case Temperature 25°C | 0.5 | 0.5 | 0.5 | 0.5 | watts |
| @ Case Temperature 100°C | 0.3 | 0.3 | 0.3 | 0.3 | watts |
| @ Free Air Temperature 25°C | 0.25 | 0.25 | 0.25 | 0.25 | watts |
| Junction Temperature (Operating) | | | | | -65°C to +200°C |
| Storage Temperature | | | | | -65°C to +200°C |

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NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

ELECTRICAL CHARACTERISTICS: @ 25°C (unless otherwise noted)

| | SYM. | CONDITIONS | 2N1034 MIN. | MAX. | 2N1035 MIN. | MAX. | 2N1036 MIN. | MAX. | 2N1037 MIN. | MAX. | UNITS |
|--|--|--|----------------|------|----------------|------|----------------|------|----------------|------|-----------|
| Collector to Base Breakdown Voltage | BVCBO | Ic = 100µA | -50 | .... | -50 | .... | -50 | .... | -50 | .... | volts |
| Collector to Emitter Breakdown Voltage | BVCEO | Ic = 1mA | -40 | .... | -35 | .... | -30 | .... | -35 | .... | volts |
| Emitter to Base Breakdown Voltage | BVEBO | Ie = 100µA | -20 | .... | -20 | .... | -20 | .... | -20 | .... | volts |
| Collector Cutoff Current | I _{CBO₁} , I _{CBO₂} | V _{CB} = -30V, V _{CB} = -30V, T = 125°C | .... | 1.0 | .... | 1.0 | .... | 1.0 | .... | 1.0 | µA |
| Emitter Cutoff Current | I _{EBO₁} , I _{EBO₂} | V _{EB} = -20V, V _{EB} = -20V, TA = 125°C | .... | 1.0 | .... | 1.0 | .... | 1.0 | .... | 1.0 | µA |
| Collector to Emitter Saturation Voltage | V _{CE} (Sat) | Ic = 8mA, Ib = 2mA | .... | -0.5 | .... | -0.4 | .... | -0.3 | .... | -0.5 | volts |
| Input Resistance | h _{ie} | V _{CE} = -6V, Ic = 1mA, f = 1kc | .... | 3.0 | .... | 3.0 | .... | 3.0 | .... | 3.0 | K ohms |

ELECTRICAL CHARACTERISTICS (cont.):

| | SYM. | CONDITIONS | 2N1034 MIN. | MAX. | 2N1035 MIN. | MAX. | 2N1036 MIN. | MAX. | 2N1037 MIN. | MAX. | UNITS |
|---|-----------------------------|--|----------------|------|----------------|------|----------------|------|----------------|------|-------|
| Output Admittance | h _{oe} | V _{CE} = -6V, Ic = 1mA, f = 1kc | .... | 70 | .... | 85 | .... | 100 | .... | 85 | µmhos |
| Small Signal Current Gain | h _{fe₁} | V _{CE} = -6V, Ic = 1mA, f = 1kc | 9 | 22 | 18 | 42 | 34 | 88 | 9 | 42 | .... |
| High Frequency Small Signal Current Gain | h _{fe₂} | V _{CE} = -6V, Ic = 1mA, f = 100kc | 1.5 | .... | 2.0 | .... | 3.0 | .... | 1.5 | .... | .... |
| Collector Capacitance | C _{ob} | V _{CE} = -6V, Ic = 1mA, f = 100kc | .... | 110 | .... | 110 | .... | 110 | .... | 110 | pf |
| Noise Figure | NF | f = 1kc, R _g = 1kΩ | .... | 30 | .... | 30 | .... | 30 | .... | 15 | db |