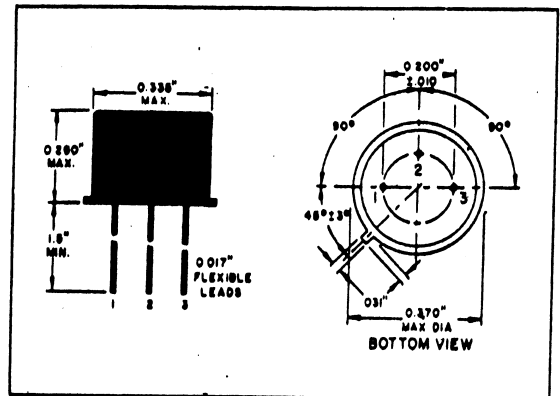


2N1034 2N1035
2N1036 2N1037

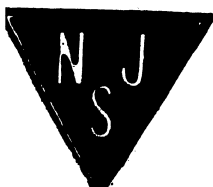


MECHANICAL DATA

CASE: JEDEC TO-5
 TERMINAL CONNECTIONS:
 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_{CB0} | -50 | -50 | -50 | -50 volts |
| Collector to Emitter Voltage V_{CE0} | -40 | -35 | -30 | -35 volts |
| Emitter to Base Voltage V_{EB0} | -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 |



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

| | SYM. | CONDITIONS | 2N1034 | | 2N1035 | | 2N1036 | | 2N1037 | | UNITS |
|---|---------------|--|--------|------|--------|------|--------|------|--------|------|---------|
| | | | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | |
| Collector to Base Breakdown Voltage | BV_{CBO} | $I_C = 100\mu A$ | -50 | .... | -50 | .... | -50 | .... | -50 | .... | volts |
| Collector to Emitter Breakdown Voltage | BV_{CEO} | $I_C = 1mA$ | -40 | .... | -35 | .... | -30 | .... | -35 | .... | volts |
| Emitter to Base Breakdown Voltage | BV_{EBO} | $I_E = 100\mu A$ | -20 | .... | -20 | .... | -20 | .... | -20 | .... | volts |
| Collector Cutoff Current | I_{CBO1} | $V_{CB} = -30V$ | .... | 1.0 | .... | 1.0 | .... | 1.0 | .... | 1.0 | μA |
| | I_{CBO2} | $V_{CB} = -30V,$ $T = 125^\circ C$ | .... | 25.0 | .... | 25.0 | .... | 25.0 | .... | 25.0 | μA |
| Emitter Cutoff Current | I_{EBO1} | $V_{EB} = -20V$ | .... | 1.0 | .... | 1.0 | .... | 1.0 | .... | 1.0 | μA |
| | I_{EBO2} | $V_{EB} = -20V,$ $T_A = 125^\circ C$ | .... | 25.0 | .... | 25.0 | .... | 25.0 | .... | 25.0 | μA |
| Collector to Emitter Saturation Voltage | $V_{CE(Sat)}$ | $I_C = 8mA,$ $I_B = 2mA$ | .... | -0.5 | .... | -0.4 | .... | -0.3 | .... | -0.5 | volts |
| Input Resistance | h_{ie} | $V_{CE} = -6V,$ $I_C = 1mA,$ $f = 1kc$ | .... | 3.0 | .... | 3.0 | .... | 3.0 | .... | 3.0 | K ohms |

ELECTRICAL CHARACTERISTICS (cont.):

| | SYM. | CONDITIONS | 2N1034 | | 2N1035 | | 2N1036 | | 2N1037 | | UNITS |
|--|-----------|--|--------|------|--------|------|--------|------|--------|------|------------|
| | | | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | |
| Output Admittance | h_{oe} | $V_{CE} = -6V,$ $I_C = 1mA,$ $f = 1kc$ | .... | 70 | .... | 85 | .... | 100 | .... | 85 | $\mu mhos$ |
| Small Signal Current Gain | h_{fe1} | $V_{CE} = -6V,$ $I_C = 1mA,$ $f = 1kc$ | 9 | 22 | 18 | 42 | 34 | 88 | 9 | 42 | .... |
| High Frequency Small Signal Current Gain | h_{fe2} | $V_{CE} = -6V,$ $I_C = 1mA,$ $f = 100kc$ | 1.5 | .... | 2.0 | .... | 3.0 | .... | 1.5 | .... | .... |
| Collector Capacitance | C_{ob} | $V_{CE} = -6V,$ $I_C = 1mA,$ $f = 100kc$ | .... | 110 | .... | 110 | .... | 110 | .... | 110 | pf |
| Noise Figure | NF | $f = 1kc,$ $R_g = 1k\Omega$ | .... | 30 | .... | 30 | .... | 30 | .... | 15 | db |