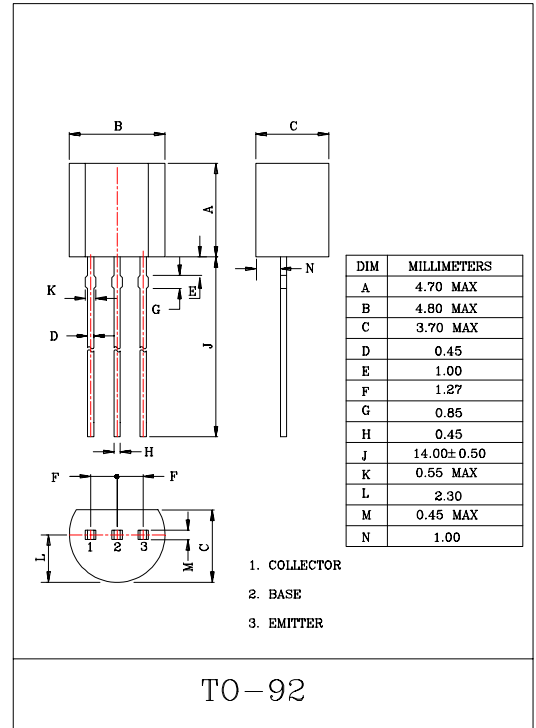


LOW NOISE AMPLIFIER APPLICATION.

MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|------------------|---------|------|
| Collector-Base Voltage | BC549 | 30 | V |
| | BC550 | 50 | |
| Collector-Emitter Voltage | BC549 | 30 | V |
| | BC550 | 45 | |
| Emitter-Base Voltage | V _{EBO} | 5 | V |
| Collector Current | I _C | 100 | mA |
| Collector Power Dissipation | P _C | 625 | mW |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature Range | T _{stg} | -55~150 | °C |



ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|------------------------|--|------|------|------|------|
| Collector-Emitter Breakdown Voltage | BC549 | I _C =10mA, I _B =0 | 30 | - | - | V |
| | BC550 | | 45 | - | - | |
| Collector-Base Breakdown Voltage | BC549 | I _C =10μA, I _E =0 | 30 | - | - | V |
| | BC550 | | 50 | - | - | |
| Emitter-Base Breakdown Voltage | V _{(BR)EBO} | I _E =10μA, I _C =0 | 5.0 | - | - | V |
| Collector Cut-off Current | I _{CBO} | V _{CB} =30V, I _E =0 | - | - | 15 | nA |
| DC Current Gain | h _{FE} (Note) | I _C =2mA, V _{CE} =5V | 110 | - | 800 | |
| Base-Emitter Voltage | V _{BE(ON)} | I _C =2mA, V _{CE} =5V | 0.55 | - | 0.7 | V |
| Collector-Emitter Saturation Voltage | V _{CE(sat)} | I _C =100mA, I _B =5mA | - | - | 0.6 | V |
| Base-Emitter Saturation Voltage | V _{BE(sat)} | I _C =100mA, I _B =5mA | - | 0.9 | - | V |
| Transition Frequency | f _T | I _E =10mA, V _{CE} =5V, f=100MHz | - | 300 | - | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} =10V, I _E =0, f=1MHz | - | - | 4.5 | pF |
| Noise Figure | BC549 | I _C =200μA, V _{CE} =5V R _g =10kΩ, f=1kHz | - | - | 4.0 | dB |
| | BC550 | | - | - | 10 | |

Note : h_{FE} Classification A:110~220, B:200~450, C:420~800