

Silicon NPN Power Transistor

2SC4466

DESCRIPTION

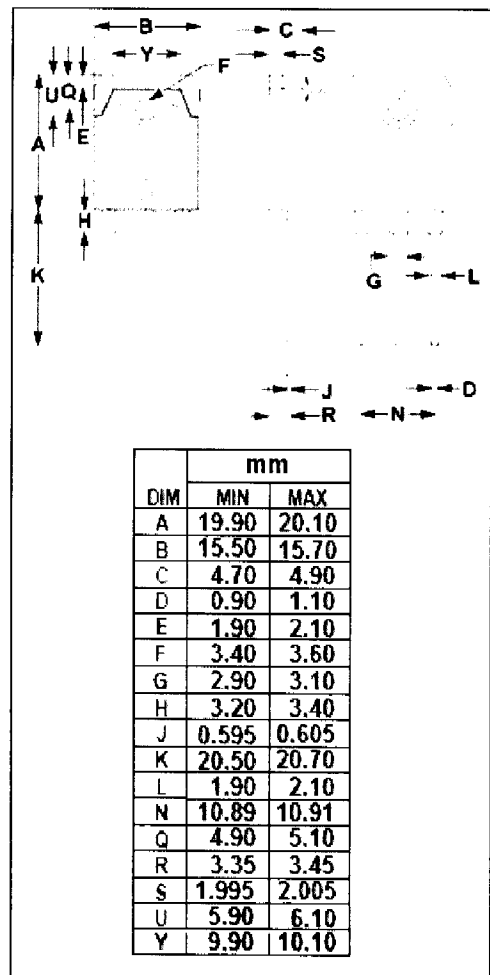
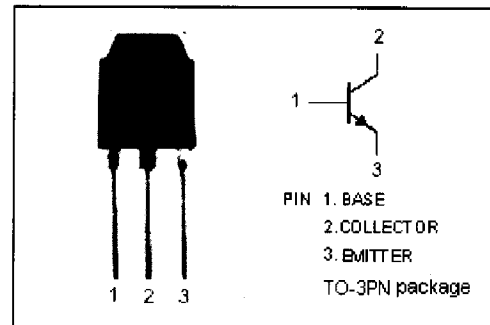
- High Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 80V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA1693

APPLICATIONS

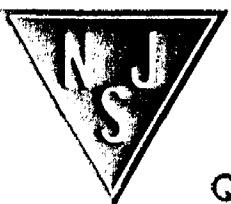
- Designed for audio and general purpose applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 120 | V |
| V_{CEO} | Collector-Emitter Voltage | 80 | V |
| V_{EBO} | Emitter-Base Voltage | 6 | V |
| I_C | Collector Current-Continuous | 6 | A |
| I_B | Base Current-Continuous | 3 | A |
| P_C | Collector Power Dissipation @ $T_C=25^\circ\text{C}$ | 60 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ\text{C}$ |



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.



Silicon NPN Power Transistor

2SC4466

ELECTRICAL CHARACTERISTICS

$T_c=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|---|-----|------|-----|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C=50\text{mA}; I_B=0$ | 80 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=2\text{A}; I_B=0.2\text{A}$ | | | 1.5 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB}=120\text{V}; I_E=0$ | | | 10 | μA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB}=6\text{V}; I_C=0$ | | | 10 | μA |
| h_{FE} | DC Current Gain | $I_C=2\text{A}; V_{CE}=4\text{V}$ | 50 | | 180 | |
| C_{OB} | Output Capacitance | $I_E=0; V_{CB}=10\text{V}; f=1.0\text{MHz}$ | | 110 | | pF |
| f_T | Current-Gain—Bandwidth Product | $I_E=-0.5\text{A}; V_{CE}=12\text{V}$ | | 20 | | MHz |

Switching Times

| | | | | | | |
|-----------|--------------|---|--|------|--|---------------|
| t_{on} | Turn-on Time | $I_C=3\text{A}, R_L=10\Omega,$ $I_{B1}=-I_{B2}=0.3\text{A}, V_{CC}=30\text{V}$ | | 0.16 | | μs |
| t_{stg} | Storage Time | | | 2.6 | | μs |
| t_f | Fall Time | | | 0.34 | | μs |

◆ h_{FE} Classifications

| O | P | Y |
|--------|--------|--------|
| 50-100 | 70-140 | 90-180 |