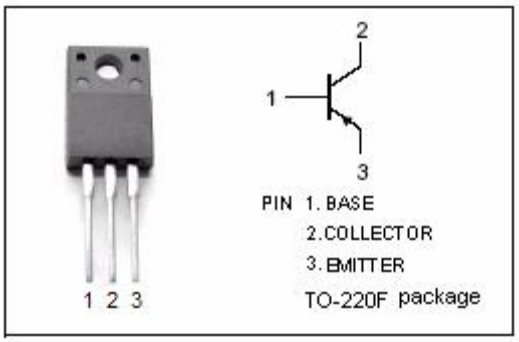
# SPTECH Silicon PNP Power Transistor

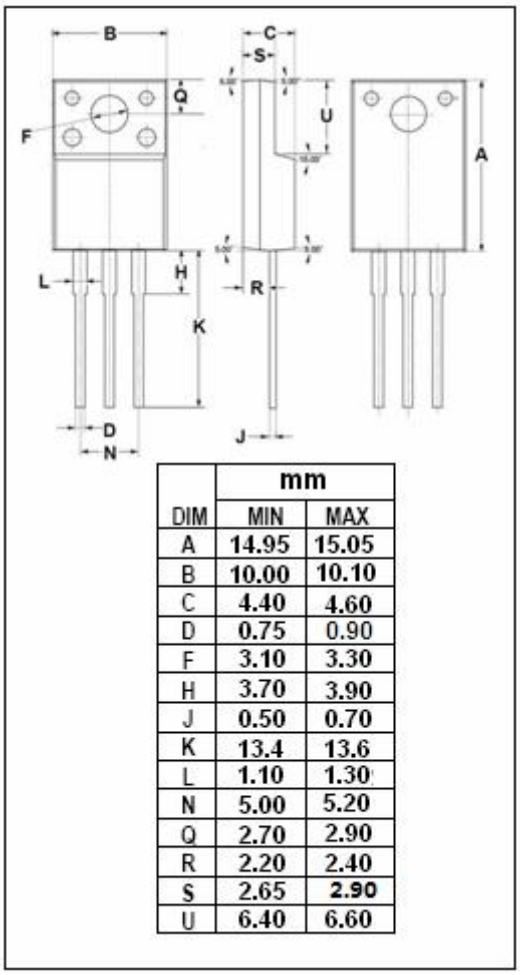



## DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -200V(Min)
- DC Current Gain-
  : $h_{FE}$= 60(Min)@ ($V_{CE}$= -10V, $I_C$= -0.7A)
- Complement to Type 2SC4382

## APPLICATIONS

- Designed for TV vertical output ,audio output driver and general purpose applications.




| DIM | mm MIN | MAX |
|---|---|---|
| A | 14.95 | 15.05 |
| B | 10.00 | 10.10 |
| C | 4.40 | 4.60 |
| D | 0.75 | 0.90 |
| F | 3.10 | 3.30 |
| H | 3.70 | 3.90 |
| J | 0.50 | 0.70 |
| K | 13.4 | 13.6 |
| L | 1.10 | 1.30 |
| N | 5.00 | 5.20 |
| Q | 2.70 | 2.90 |
| R | 2.20 | 2.40 |
| S | 2.65 | 2.90 |
| U | 6.40 | 6.60 |

## ABSOLUTE MAXIMUM RATINGS($T_a$=25℃)

| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | -200 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | -200 | V |
| $V_{EBO}$ | Emitter-Base Voltage | -6 | V |
| $I_C$ | Collector Current-Continuous | -2 | A |
| $I_B$ | Base Current-Continuous | -1 | A |
| $P_C$ | Collector Power Dissipation @$T_C$=25℃ | 25 | W |
| $T_J$ | Junction Temperature | 150 | ℃ |
| $T_{stg}$ | Storage Temperature | -55~150 | ℃ |

# SPTECH Silicon PNP Power Transistor

## ELECTRICAL CHARACTERISTICS

**Tj=25℃ unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C$= -25mA ; $I_B$= 0 | -200 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C$= -0.7A; $I_B$= -0.07A | | | -1.0 | V |
| $I_{CBO}$ | Collector Cutoff Current | $V_{CB}$= -200V ; $I_E$=0 | | | -10 | μA |
| $I_{EBO}$ | Emitter Cutoff Current | $V_{EB}$= -6V; $I_C$=0 | | | -10 | μA |
| $h_{FE}$ | DC Current Gain | $I_C$= -0.7A ; $V_{CE}$= -10V | 60 | | | |
| $C_{OB}$ | Output Capacitance | $I_E$= 0; $V_{CB}$= -10V; f= 1MHz | | 60 | | pF |
| $f_T$ | Current-Gain—Bandwidth Product | $I_E$= 0.2A ; $V_{CE}$= -12V | | 20 | | MHz |

Switching Times

| | | | | | | |
|---|---|---|---|---|---|---|
| $t_{on}$ | Turn-On Time | $I_C$= -1A; $I_{B1}$= -$I_{B2}$= -0.1A; $V_{CC}$= -20V; $R_L$= 20Ω | | 0.4 | | μs |
| $t_{stg}$ | Storage Time | | | 1.5 | | μs |
| $t_f$ | Fall Time | | | 0.5 | | μs |