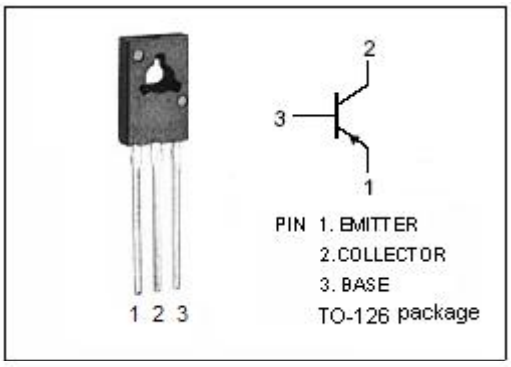
# *isc* Silicon PNP Power Transistor 2SA505

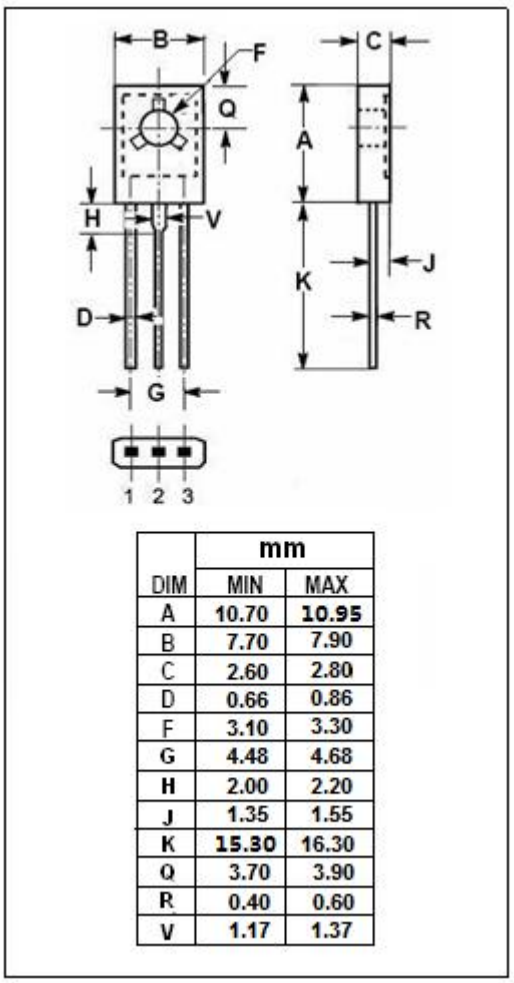
## DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  $V_{(BR)CEO}$= -50V (Min.)
- Collector-Emitter Saturation Voltage-
  $V_{CE(sat)}$= -0.8V (Max.)@ $I_C$= -500mA
- Minimum Lot-to-Lot variations for robust device performance and reliable operation




## APPLICATIONS

- Designed for medium power amplifier applications.




| DIM | mm MIN | mm MAX |
|---|---|---|
| A | 10.70 | 10.95 |
| B | 7.70 | 7.90 |
| C | 2.60 | 2.80 |
| D | 0.66 | 0.86 |
| F | 3.10 | 3.30 |
| G | 4.48 | 4.68 |
| H | 2.00 | 2.20 |
| J | 1.35 | 1.55 |
| K | 15.30 | 16.30 |
| Q | 3.70 | 3.90 |
| R | 0.40 | 0.60 |
| V | 1.17 | 1.37 |

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | -60 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | -50 | V |
| $V_{EBO}$ | Emitter-Base Voltage | -5.0 | V |
| $I_C$ | Collector Current-Continuous | -1 | A |
| $I_E$ | Emitter Current-Continuous | 1 | A |
| $P_C$ | Collector Power Dissipation | 1 | W |
| $T_J$ | Junction Temperature | 150 | ℃ |
| $T_{stg}$ | Storage Temperature Range | -55~150 | ℃ |

# isc Silicon PNP Power Transistor 2SA505

## ELECTRICAL CHARACTERISTICS

**$T_C$=25℃ unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C$= -10mA; $I_B$= 0 | -50 | | | V |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E$= -1mA; $I_C$= 0 | -5 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C$= -500mA; $I_B$= -50mA | | | -0.8 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $I_C$= -500mA; $V_{CE}$= -2V | | | -1.3 | V |
| $I_{CBO}$ | Collector Cutoff Current | $V_{CB}$= -30V; $I_E$= 0 | | | -1.0 | μA |
| $I_{EBO}$ | Emitter Cutoff Current | $V_{EB}$= -5; $I_C$= 0 | | | -1.0 | μA |
| $h_{FE-1}$ | DC Current Gain | $I_C$= -50mA; $V_{CE}$= -2V | 40 | | 240 | |
| $h_{FE-2}$ | DC Current Gain | $I_C$= -800mA; $V_{CE}$= -2V | 13 | | | |

◆ **$h_{FE-1}$ Classifications**

| R | O | Y |
|---|---|---|
| 40-80 | 70-140 | 120-240 |

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