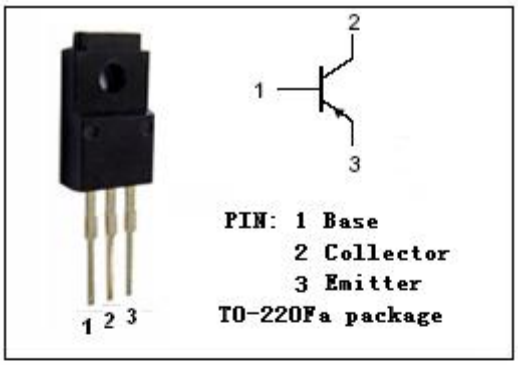
# *isc* Silicon PNP Power Transistor — 2SB941

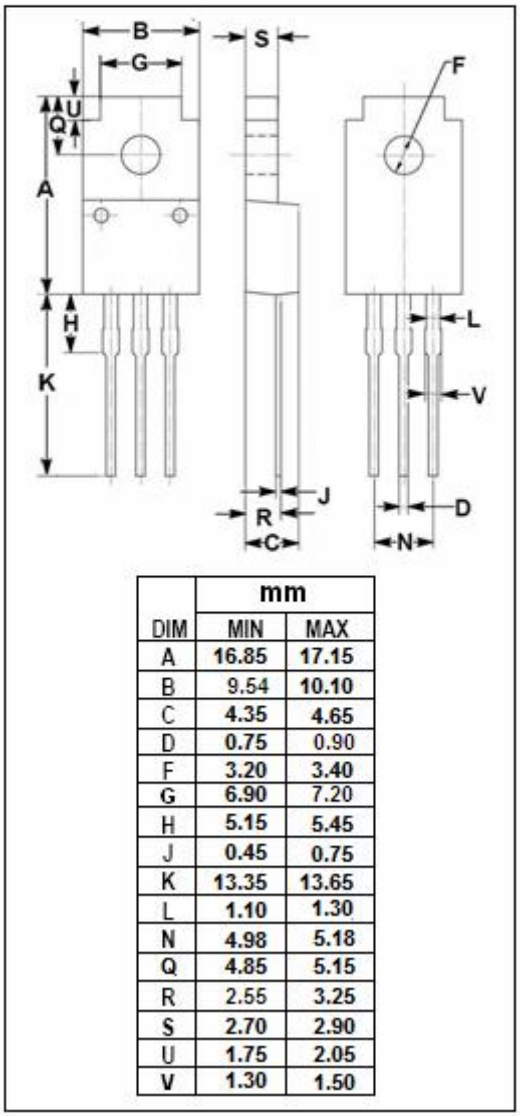



## DESCRIPTION

- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= -1.2V(Max)@$I_C$= -3A
- Good Linearity of $h_{FE}$
- Complement to Type 2SD1266
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Designed for low-frequency power amplifications.




| DIM | mm MIN | mm MAX |
|---|---|---|
| A | 16.85 | 17.15 |
| B | 9.54 | 10.10 |
| C | 4.35 | 4.65 |
| D | 0.75 | 0.90 |
| F | 3.20 | 3.40 |
| G | 6.90 | 7.20 |
| H | 5.15 | 5.45 |
| J | 0.45 | 0.75 |
| K | 13.35 | 13.65 |
| L | 1.10 | 1.30 |
| N | 4.98 | 5.18 |
| Q | 4.85 | 5.15 |
| R | 2.55 | 3.25 |
| S | 2.70 | 2.90 |
| U | 1.75 | 2.05 |
| V | 1.30 | 1.50 |

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | -60 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | -60 | V |
| $V_{EBO}$ | Emitter-Base Voltage | -5 | V |
| $I_C$ | Collector Current-Continuous | -3 | A |
| $I_{CM}$ | Collector Current-Peak | -5 | A |
| $P_C$ | Collector Power Dissipation @ $T_a$=25℃ | 2 | W |
| | Collector Power Dissipation @ $T_C$=25℃ | 35 | W |
| $T_J$ | Junction Temperature | 150 | ℃ |
| $T_{stg}$ | Storage Temperature Range | -55~150 | ℃ |

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## ELECTRICAL CHARACTERISTICS

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

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C$= -30mA ; $I_B$= 0 | -60 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C$= -3A; $I_B$= -0.375A | | | -1.2 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $I_C$= -3A ; $V_{CE}$= -4V | | | -1.8 | V |
| $I_{CES}$ | Collector Cutoff Current | $V_{CE}$= -60V ; $V_{BE}$= 0 | | | -200 | μA |
| $I_{CEO}$ | Collector Cutoff Current | $V_{CE}$= -30V ; $I_B$= 0 | | | -300 | μA |
| $I_{EBO}$ | Emitter Cutoff Current | $V_{EB}$= -5V ; $I_C$= 0 | | | -1 | mA |
| $h_{FE-1}$ | DC Current Gain | $I_C$= -1A ; $V_{CE}$= -4V | 70 | | 250 | |
| $h_{FE-2}$ | DC Current Gain | $I_C$= -3A ; $V_{CE}$= -4V | 10 | | | |

◆ **$h_{FE-1}$ Classifications**

| Q | P |
|---|---|
| 70-150 | 120-250 |

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