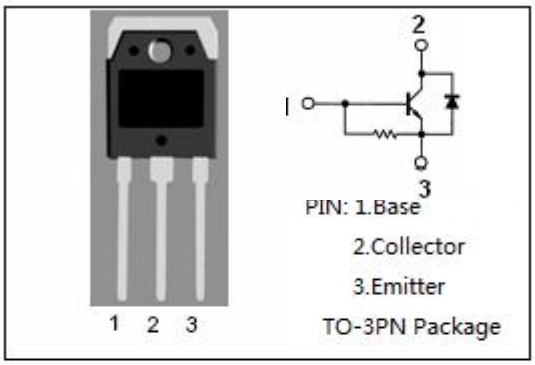
# isc Silicon NPN Power Transistor — 2SD1454




## DESCRIPTION

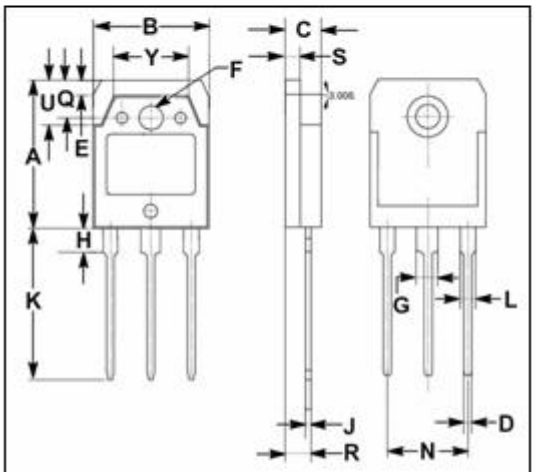
- High Breakdown Voltage-
  : $V_{CBO}$= 1500V (Min)
- High Switching Speed
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Designed for TV horizontal deflection output applications.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{CES}$ | Collector-Emitter Voltage | 1500 | V |
| $V_{EBO}$ | Emitter-Base Voltage | 6 | V |
| $I_C$ | Collector Current-Continuous | 4 | A |
| $P_C$ | Collector Power Dissipation @ $T_C$= 25℃ | 50 | W |
| $T_J$ | Junction Temperature | 150 | ℃ |
| $T_{stg}$ | Storage Temperature Range | -45~150 | ℃ |




| DIM | mm MIN | MAX |
|---|---|---|
| A | 19.60 | 20.30 |
| B | 15.50 | 15.70 |
| C | 4.70 | 4.90 |
| D | 0.90 | 1.10 |
| E | 1.90 | 2.10 |
| F | 3.40 | 3.60 |
| G | 2.90 | 3.20 |
| H | 3.20 | 3.40 |
| J | 0.595 | 0.605 |
| K | 19.80 | 20.70 |
| L | 1.90 | 2.20 |
| N | 10.89 | 10.91 |
| Q | 4.90 | 5.10 |
| R | 3.35 | 3.45 |
| S | 1.995 | 2.100 |
| U | 5.90 | 6.20 |
| Y | 9.90 | 10.10 |

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## ELECTRICAL CHARACTERISTICS

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

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E$= 200mA; $I_C$= 0 | 6 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C$= 3.5A; $I_B$= 1A | | | 5.0 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C$= 3.5A; $I_B$= 1A | | | 1.5 | V |
| $I_{CES}$ | Collector Cutoff Current | $V_{CE}$= 1500V; $R_{BE}$= ∞ | | | 0.5 | mA |
| $h_{FE}$ | DC Current Gain | $I_C$= 1A; $V_{CE}$= 5V | 6 | 12 | | |
| $V_{ECF}$ | C-E Diode Forward Voltage | $I_F$= 4A | | | 2.2 | V |