

isc Silicon PNP Darlington Power Transistor

BD676A

DESCRIPTION

- Collector–Emitter Breakdown Voltage—
- : $V_{(BR)CEO} = -45 \text{ V}$
- DC Current Gain-
 - : $h_{FE} = 750(Min) @ I_{C} = -2 A$
- · Complement to Type BD675A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

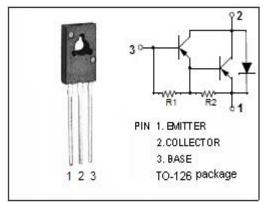
 Designed for use as output devices in complementary general-purpose amplifier applications.

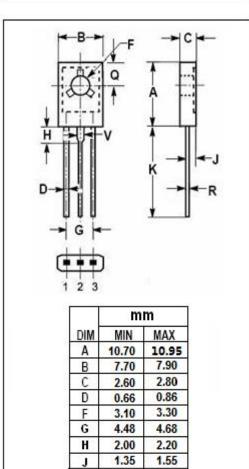
ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | VALUE | UNIT | |
|------------------|--|---------|------------|--|
| V _{CBO} | Collector-Base Voltage | -45 | V | |
| V _{CEO} | Collector-Emitter Voltage | -45 | V | |
| V _{EBO} | Emitter-Base Voltage | -5 | V | |
| Ic | Collector Current-Continuous | -4 | Α | |
| Ι _Β | Base Current | -0.1 | Α | |
| Pc | Collector Power Dissipation T_c =25 $^{\circ}$ C | 40 | W | |
| Ti | Junction Temperature 150 | | $^{\circ}$ | |
| T _{stg} | Storage Temperature Range | -55~150 | $^{\circ}$ | |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | | UNIT |
|---------------------|--------------------------------------|------|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 3.13 | °C/W |





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|-----|-------|-------|
| DIM | MIN | MAX |
| Α | 10.70 | 10.95 |
| В | 7.70 | 7.90 |
| C | 2.60 | 2.80 |
| D | 0.66 | 0.86 |
| F | 3.10 | 3.30 |
| G | 4.48 | 4.68 |
| Н | 2.00 | 2.20 |
| J | 1.35 | 1.55 |
| K | 15.30 | 16.30 |
| Q | 3.70 | 3.90 |
| R | 0.40 | 0.60 |
| ٧ | 1.17 | 1.37 |



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ELECTRICAL CHARACTERISTICS

Tc=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|--------------|------|
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage | I _C = -50mA; I _B = 0 | -45 | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = -2A; I _B = -40mA | | -2.8 | V |
| V _{BE(on)} | Base-Emitter On Voltage | I _C = -2A; V _{CE} = -3V | | -2.5 | V |
| I _{CEO} | Collector Cutoff Current | V _{CE} = -45V; I _B = 0 | | -0.5 | mA |
| Ісво | Collector Cutoff Current | V _{CB} = -45V; I _E = 0 V _{CB} = -45V; I _E = 0;T _C = 100°C | | -0.2 -2.0 | mA |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = -5V; I _C = 0 | | -2.0 | mA |
| h _{FE} | DC Current Gain | Ic= -2 A; Vc== -3V | 750 | | |

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