



# TR BDX67C;HTC;TO3;tranzystor; NPN;Darlington;16A;120V;150W



## Dane techniczne:

Nazwa: BDX67C

Układ Darlington

Typ tranzystora: bipolarny

Kierunek przewodnictwa: NPN

Prąd kolektora: 16A

Napięcie kolektor-emiter: 120V

Moc: 150W

Obudowa: TO3

Producent: HTC

## Silicon NPN Power Transistors

## BDX67C

**DESCRIPTION**

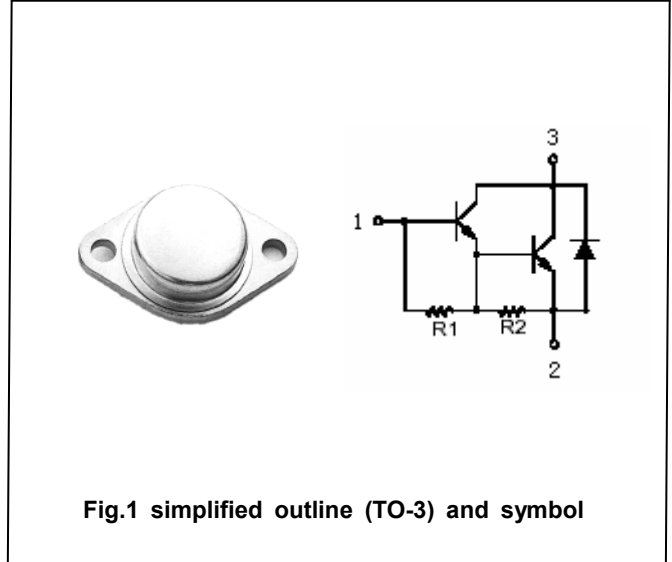
- With TO-3 package
- High current capability
- DARLINGTON

**APPLICATIONS**

- Designed for power amplification and switching application.

**PINNING (See Fig.2)**

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Base        |
| 2   | Emitter     |
| 3   | Collector   |

**Absolute maximum ratings(Ta=25□)**

| SYMBOL           | PARAMETER                 | CONDITIONS          | VALUE   | UNIT |
|------------------|---------------------------|---------------------|---------|------|
| V <sub>CBO</sub> | Collector-base voltage    | Open emitter        | 140     | V    |
| V <sub>CEO</sub> | Collector-emitter voltage | Open base           | 120     | V    |
| V <sub>EBO</sub> | Emitter-base voltage      | Open collector      | 5       | V    |
| I <sub>C</sub>   | Collector current         |                     | 16      | A    |
| I <sub>CM</sub>  | Collector current(peak)   |                     | 20      | A    |
| I <sub>B</sub>   | Base current              |                     | 0.25    | A    |
| P <sub>T</sub>   | Total power dissipation   | T <sub>C</sub> =25□ | 117     | W    |
| T <sub>j</sub>   | Junction temperature      |                     | 150     | □    |
| T <sub>stg</sub> | Storage temperature       |                     | -55~200 | □    |

**THERMAL CHARACTERISTICS**

| SYMBOL              | PARAMETER                                | MAX  | UNIT |
|---------------------|--|------|------|
| R <sub>th j-c</sub> | Thermal resistance from junction to case | 1.17 | □/W  |

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

| SYMBOL                | PARAMETER                            | CONDITIONS   | MIN | TYP. | MAX    | UNIT |
|-----------------------|--------------------------------------|--|-----|------|--------|------|
| V <sub>CEQ(SUS)</sub> | Collector-emitter sustaining voltage | I <sub>C</sub> =0.1A ; I <sub>B</sub> =0;L=25mH                  | 120 |      |        | V    |
| V <sub>CEsat</sub>    | Collector-emitter saturation voltage | I <sub>C</sub> =10A ;I <sub>B</sub> =0.04A                       |     |      | 2      | V    |
| I <sub>CBO</sub>      | Collector cut-off current            | V <sub>CB</sub> =70V; I <sub>E</sub> =0<br>T <sub>C</sub> =150°C |     |      | 1<br>5 | mA   |
| I <sub>CEO</sub>      | Collector cut-off current            | V <sub>CE</sub> =60V; I <sub>B</sub> =0                          |     |      | 3      | mA   |
| I <sub>EBO</sub>      | Emitter cut-off current              | V <sub>EB</sub> =5V; I <sub>C</sub> =0                           |     |      | 3      | mA   |

## Switching times

|                  |               |  |  |     |  |    |
|------------------|---------------|--|--|-----|--|----|
| t <sub>on</sub>  | Turn-on time  | I <sub>C</sub> =-10A ;<br>I <sub>B1</sub> =-I <sub>B2</sub> =0.04A<br>V <sub>CC</sub> =12V ; |  | 1.0 |  | μs |
| t <sub>off</sub> | Turn-off time |  |  | 3.5 |  | μs |

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PACKAGE OUTLINE

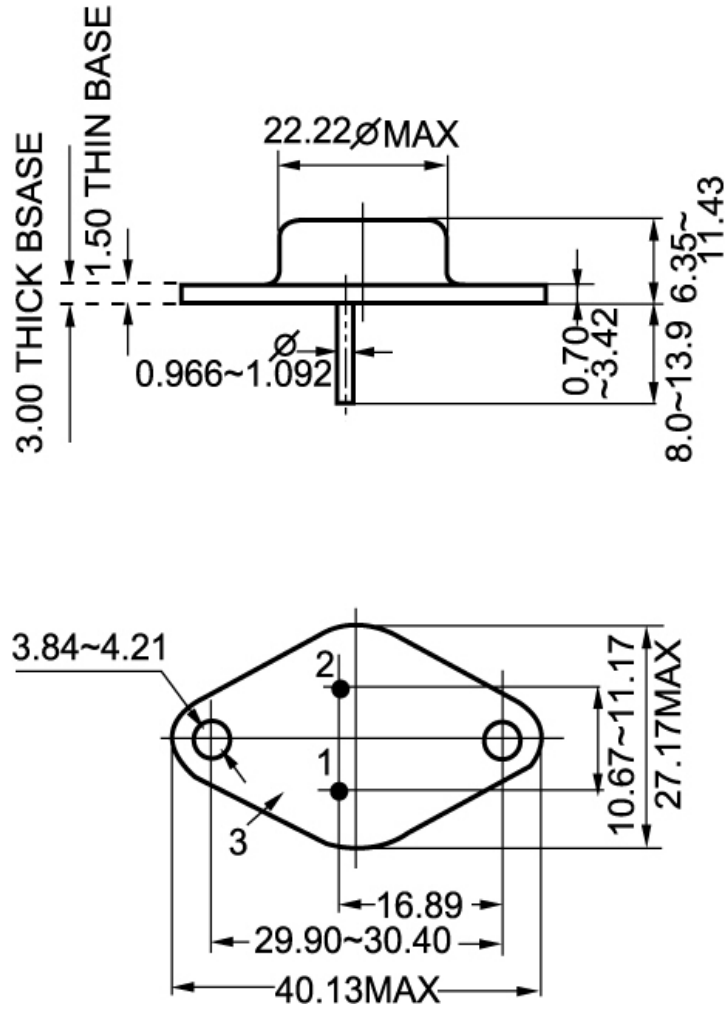


Fig.2 Outline dimensions