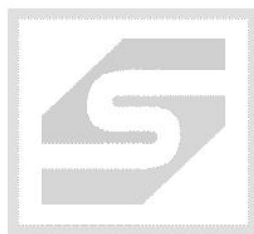
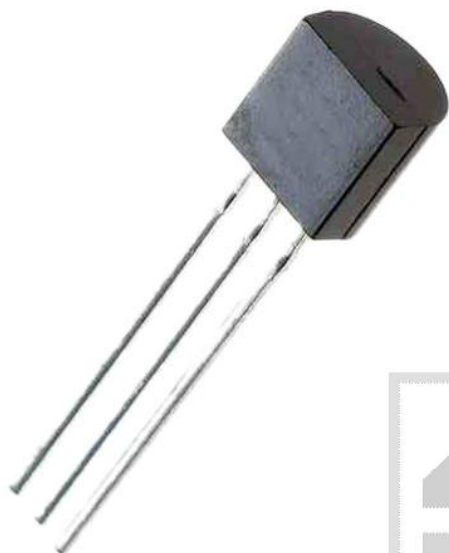




# TR BC337-25;LGE;TO92; tranzystor; NPN;0.8A;50V;0.625W;Pbf



## Dane techniczne:

Nazwa: BC337-25

Typ tranzystora: bipolarny

Kierunek przewodnictwa: PNP

Prąd kolektora: 0.8A

Napięcie kolektor-emiter: 50V

Moc: 0.625W

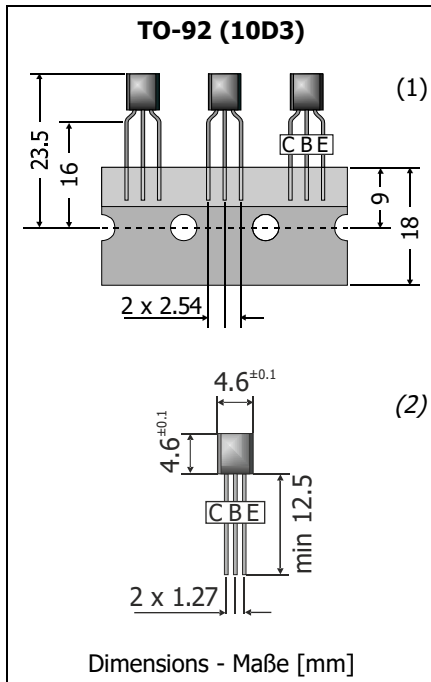
Obudowa: TO92

Montaż: przewlekany (THT)

Producent: LGE

|   |   |   |
|---|---|---|
| <b>BC337 ... BC338</b><br><b>General Purpose NPN Transistors</b><br><b>Universal-NPN-Transistoren</b> | <b>I<sub>C</sub> = 800 mA</b><br><b>h<sub>FE</sub> = 160/250/400</b><br><b>T<sub>jmax</sub> = 150°C</b> | <b>V<sub>CEO</sub> = 25...45 V</b><br><b>P<sub>tot</sub> = 625 mW</b> |
|---|---|---|

Version 2017-02-09



**Typical Applications**

Signal processing,  
Switching, Amplification  
Commercial grade <sup>1)</sup>

**Features**

General Purpose  
Three current gain groups  
Compliant to RoHS, REACH,  
Conflict Minerals <sup>1)</sup>

**Mechanical Data <sup>1)</sup>**

- (1) Taped in ammo pack (Raster 2.54) 4000
- (2) On request: in bulk (Raster 1.27, suffix "BK") 5000

Weight approx. 0.01 g  
Case material UL 94V-0  
Solder & assembly conditions 260°C/10s  
MSL N/A



**Typische Anwendungen**

Signalverarbeitung,  
Schalten, Verstärken  
Standardausführung <sup>1)</sup>

**Besonderheiten**

Universell anwendbar  
Drei Stromverstärkungsklassen  
Konform zu RoHS, REACH,  
Konfliktmineralien <sup>1)</sup>

**Mechanische Daten <sup>1)</sup>**

- (1) Gegurtet in Ammo-Pack (Raster 2.54)
- (2) Auf Anfrage: Schüttgut (Raster 1.27, Suffix "BK")

Gewicht ca. 0.01 g  
Gehäusematerial UL 94V-0  
Löt- und Einbaubedingungen 260°C/10s

| Current gain groups<br>Stromverstärkungsgruppen |                                  | Recommended complementary PNP transistors<br>Empfohlene komplementäre PNP-Transistoren |
|---|----------------------------------|--|
| BC337-16<br>BC337-25<br>BC337-40                | BC338-16<br>BC338-25<br>BC338-40 | BC327 ... BC328  |

**Maximum ratings <sup>2)</sup>**

**Grenzwerte <sup>2)</sup>**

|  |           |                  | BC337                | BC338 |
|--|-----------|------------------|----------------------|-------|
| Collector-Emitter-volt. – Kollektor-Emitter-Spannung | E-B short | V <sub>CEs</sub> | 50 V                 | 30 V  |
| Collector-Emitter-volt. – Kollektor-Emitter-Spannung | B open    | V <sub>CEO</sub> | 45 V                 | 25 V  |
| Emitter-Base-voltage – Emitter-Basis-Spannung        | C open    | V <sub>EBO</sub> | 5 V                  |       |
| Power dissipation – Verlustleistung                  |           | P <sub>tot</sub> | 625 mW <sup>3)</sup> |       |
| Collector current – Kollektorstrom (dc)              |           | I <sub>C</sub>   | 800 mA               |       |
| Peak Collector current – Kollektor-Spitzenstrom      |           | I <sub>CM</sub>  | 1 A                  |       |
| Base current – Basisstrom                            |           | I <sub>B</sub>   | 100 mA               |       |
| Junction temperature – Sperrschichttemperatur        |           | T <sub>J</sub>   | -55...+150°C         |       |
| Storage temperature – Lagerungstemperatur            |           | T <sub>S</sub>   | -55...+150°C         |       |

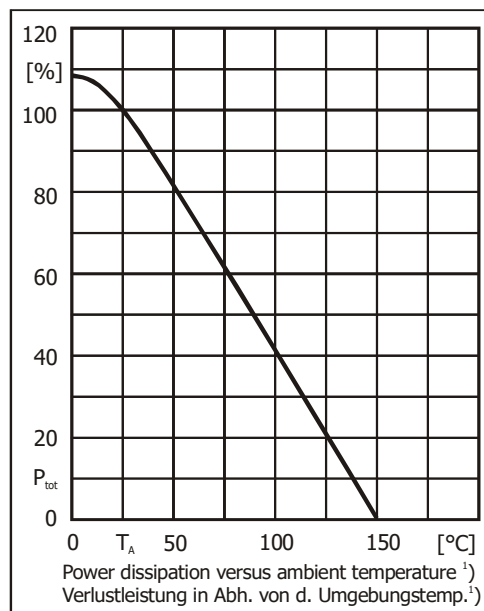
1 Please note the [detailed information on our website](#) or at the beginning of the data book  
Bitte beachten Sie die [detaillierten Hinweise auf unserer Internetseite](#) bzw. am Anfang des Datenbuches

2 T<sub>A</sub> = 25°C, unless otherwise specified – T<sub>A</sub> = 25°C, wenn nicht anders angegeben

3 Valid, if leads are kept at ambient temperature at a distance of 2 mm from case  
Gültig wenn die Anschlussdrähte in 2 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden

**Characteristics**
**Kennwerte**

|   |                           |                |                | $T_j = 25^\circ\text{C}$ |                         |                  |       |
|---|---------------------------|----------------|----------------|--------------------------|-------------------------|------------------|-------|
|   |                           |                |                | Min.                     | Typ.                    | Max.             |       |
| DC current gain – Kollektor-Basis-Stromverhältnis                                 |                           |                |                |                          |                         |                  |       |
| $V_{CE} = 1\text{ V}, I_C = 100\text{ mA}$  | Group -16                 | $h_{FE}$       |                | 100                      | 160                     | 250              |       |
|   | Group -25                 |                |                | 160                      | 250                     | 400              |       |
|   | Group -40                 |                |                | 250                      | 400                     | 630              |       |
| $V_{CE} = 1\text{ V}, I_C = 300\text{ mA}$  | Group -16                 | $h_{FE}$       |                | 60                       | 130                     | –                |       |
|   | Group -25                 |                |                | 100                      | 200                     | –                |       |
|   | Group -40                 |                |                | 170                      | 320                     | –                |       |
| Collector-Emitter saturation voltage – Kollektor-Sättigungsspannung <sup>1)</sup> |                           |                |                |                          |                         |                  |       |
| $I_C = 500\text{ mA}, I_B = 50\text{ mA}$   |                           |                |                | $V_{CEsat}$              | –                       | –                | 0.7 V |
| Base-Emitter-voltage – Basis-Emitter-Spannung <sup>1)</sup>                       |                           |                |                |                          |                         |                  |       |
| $V_{CE} = 1\text{ V}, I_C = 300\text{ mA},$                                       |                           |                |                | $V_{BE}$                 | –                       | –                | 1.2 V |
| Collector-Emitter cutoff current – Kollektor-Emitter-Reststrom                    |                           |                |                |                          |                         |                  |       |
| $V_{CE} = 45\text{ V}$<br>$V_{CE} = 25\text{ V}$                                  | B-E short                 | BC337<br>BC338 | $I_{CES}$      | –                        | 2 nA                    | 100 nA           |       |
|   |                           |                |                | –                        | 2 nA                    | 100 nA           |       |
| $V_{CE} = 45\text{ V}$<br>$V_{CE} = 25\text{ V}$                                  | $T_j = 125^\circ\text{C}$ | B-E short      | BC337<br>BC338 | $I_{CES}$                | –                       | 10 $\mu\text{A}$ |       |
|   |                           |                |                | –                        | –                       | 10 $\mu\text{A}$ |       |
| Gain-Bandwidth Product – Transitfrequenz  |                           |                |                |                          |                         |                  |       |
| $V_{CE} = 5\text{ V}, I_C = 10\text{ mA}, f = 50\text{ MHz}$                      |                           |                |                | $f_T$                    | –                       | 100 MHz          | –     |
| Collector-Base Capacitance – Kollektor-Basis-Kapazität                            |                           |                |                |                          |                         |                  |       |
| $V_{CB} = 10\text{ V}, I_E = i_e = 0, f = 1\text{ MHz}$                           |                           |                |                | $C_{CBO}$                | –                       | 12 pF            | –     |
| Thermal resistance junction to ambient<br>Wärmewiderstand Sperrschicht – Umgebung |                           |                |                | $R_{thA}$                | < 200 K/W <sup>2)</sup> |                  |       |



**Disclaimer:** See data book page 2 or [website](#)  
**Haftungsausschluss:** Siehe Datenbuch Seite 2 oder [Internet](#)

- 1 Tested with pulses  $t_p = 300\ \mu\text{s}$ , duty cycle  $\leq 2\%$   
Gemessen mit Impulsen  $t_p = 300\ \mu\text{s}$ , Schaltverhältnis  $\leq 2\%$
- 2 Valid, if leads are kept at ambient temperature at a distance of 2 mm from case  
Gültig wenn die Anschlussdrähte in 2 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden