

### / Descriptions

TO-263          NPN          Silicon NPN transistor in a TO-263 Plastic Package.

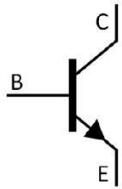
### / Features

TIP42CB  
Complement to TIP42CB.

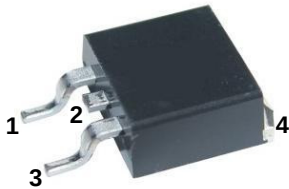
### / Applications

Medium power linear switching applications.

### / Equivalent Circuit



### / Pinning



PIN1   Base          PIN 2   4   Collector          PIN 3   Emitter

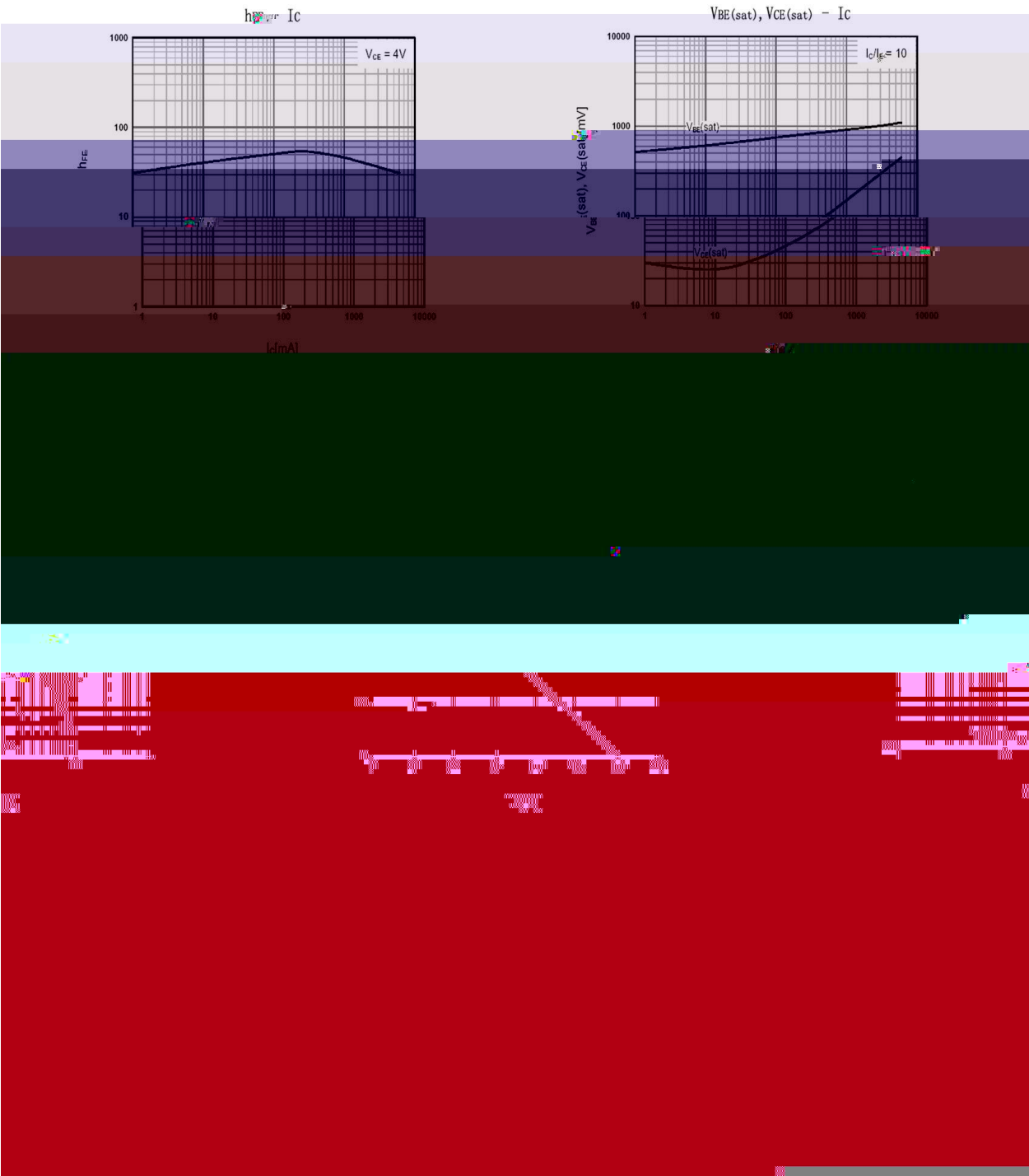
### / $h_{FE}$ Classifications & Marking

See Marking Instructions.

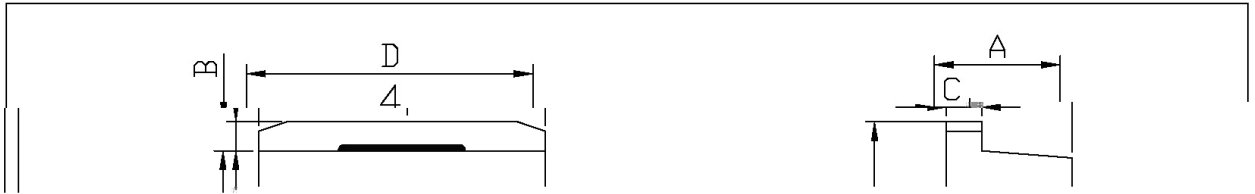
| Parameter                      | Symbol                 | Rating  | Unit |
|--------------------------------|------------------------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$              | 100     | V    |
| Collector to Emitter Voltage   | $V_{CEO}$              | 100     | V    |
| Emitter to Base Voltage        | $V_{EBO}$              | 5       | V    |
| Collector Current - Continuous | $I_C$                  | 6       | A    |
| Peak Collector Current         | $I_{CP}$               | 10      | A    |
| Base Current - Continuous      | $I_B$                  | 2       | A    |
| Collector Power Dissipation    | $P_C$                  | 2       | W    |
| Collector Power Dissipation    | $P_C (T_c=25^\circ C)$ | 65      | W    |
| Junction Temperature           | $T_j$                  | 150     |      |
| Storage Temperature Range      | $T_{sag}$              | -55 150 |      |

| Parameter                           | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-------------------------------------|--------|-----------------|-----|-----|-----|------|
| Collector to Emitter Breakdown<br>V |        |                 |     |     |     |      |

/ Electrical Characteristic Curve

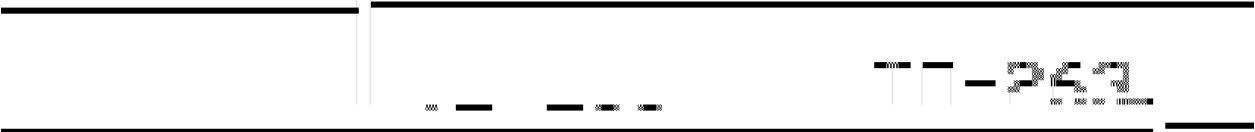


/ Package Dimensions

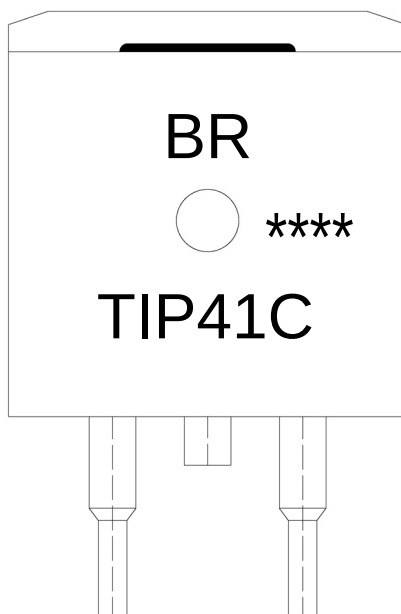


单位: mm

| Dimensions in Millimeters |      |       | Dimensions in Millimeters |       |       |
|---------------------------|------|-------|---------------------------|-------|-------|
| Symbol                    | Min  | Max   | Symbol                    | Min   | Max   |
| A                         | 4.30 | 4.70  | FL                        | 9.00  | 9.40  |
| B                         | 1.00 | 1.40  | e1                        | 2.34  | 2.74  |
| b                         | 0.70 | 0.90  | e2                        | 4.88  | 5.28  |
| b1                        | 1.15 | 1.35  | L1                        | 15.00 | 16.00 |
| b2                        | 0.40 | 0.60  | L2                        | 2.24  | 2.84  |
| C                         | 1.20 | 1.40  | L3                        | 1.20  | 1.60  |
| D                         | 9.80 | 10.20 |                           |       |       |



/ Marking Instructions



BR

TIP41C

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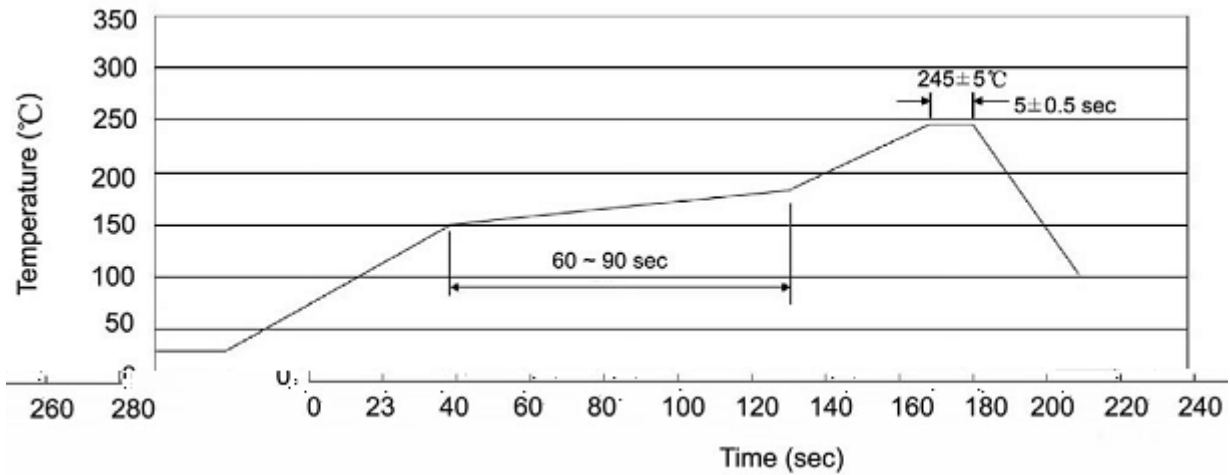
Note:

BR: Company Code

TIP41C: Product Type.

\*\*\*\*: Lot No. Code, code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- |   |       |     |           |                                         |                                      |
|---|-------|-----|-----------|-----------------------------------------|--------------------------------------|
| 1 | 25    | 150 | 60        | 90sec;                                  | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 |     | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |                                      |
| 3 |       | 2   | 10        | /sec.                                   | 3. Cooling Speed: 2~10 /sec.         |

/ Resistance to Soldering Heat Test Conditions

260±5      10±1 sec.      Temp.:260±5      Time:10±1 sec

/ Packaging SPEC.

/ REEL

| Package Type | Units           |                      |                      |                            |                      | Dimension (unit mm <sup>3</sup> ) |            |             |
|--------------|-----------------|----------------------|----------------------|----------------------------|----------------------|-----------------------------------|------------|-------------|
|              | Units/Reel<br>/ | Reels/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Reel                              | Inner Box  | Outer Box   |
| TO-263       | 800             | 1                    | 800                  | 5                          | 4,000                | 13 ×24                            | 360×360×50 | 385×257×392 |

/ TUBE

| Package Type | Units           |                      |                      |                            |                      | Dimension (unit mm <sup>3</sup> ) |            |             |
|--------------|-----------------|----------------------|----------------------|----------------------------|----------------------|-----------------------------------|------------|-------------|
|              | Units/Tube<br>/ | Tubes/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Tube                              | Inner Box  | Outer Box   |
| TO-263       | 50              | 20                   | 1,000                | 5                          | 5,000                | 532×33×7.0                        | 555×164×50 | 575×290×180 |

/ Notices