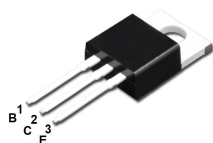
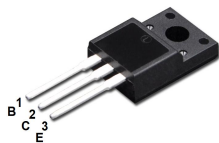


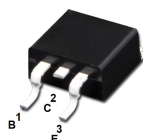
## NPN Silicon Epitaxial Planar Transistor



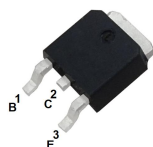
TO-220AB



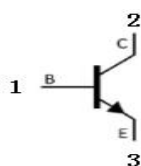
TO-220F



TO-263



TO-252



1.Base,2.Collector,3.Emitter

### FEATURES

- High voltage
- High speed switching


**RoHS**  
 COMPLIANT

### APPLICATIONS

- ELECTRONIC TRANSFORMER
- SWITCH MODE POWER SUPPLY

### MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum, 10s per JESD 22-B106

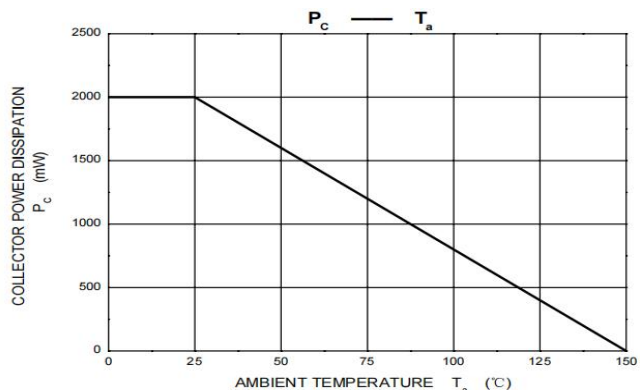
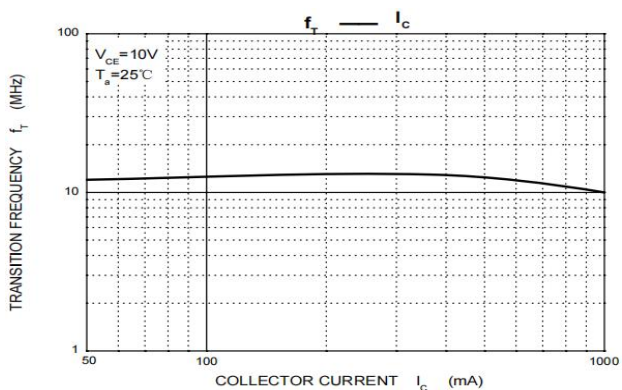
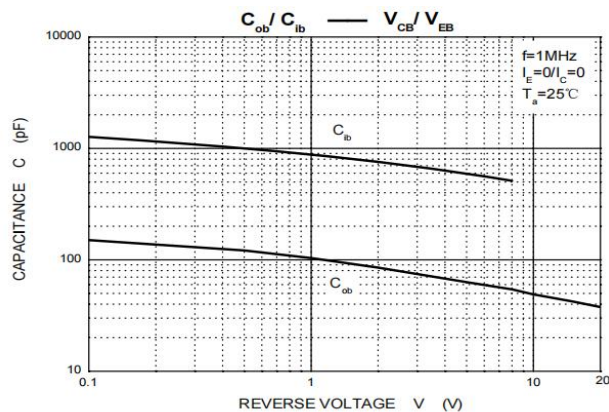
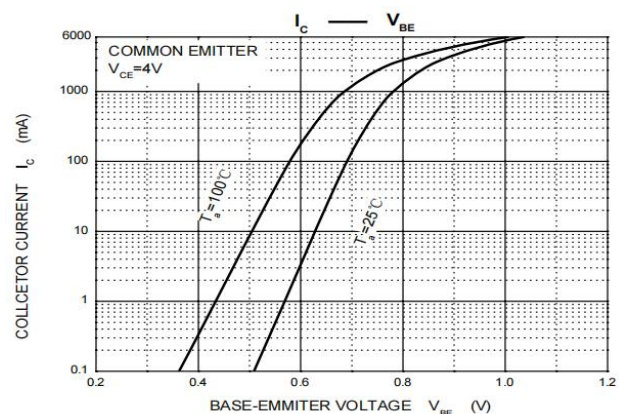
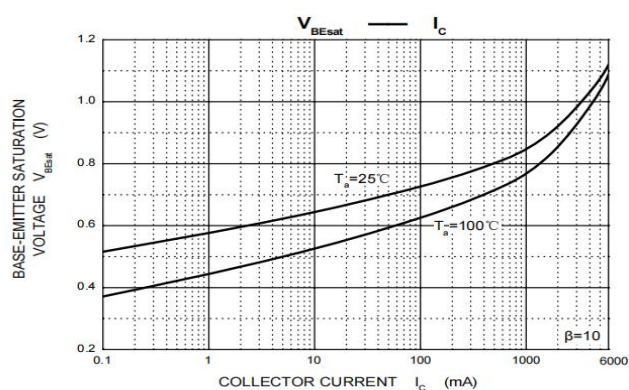
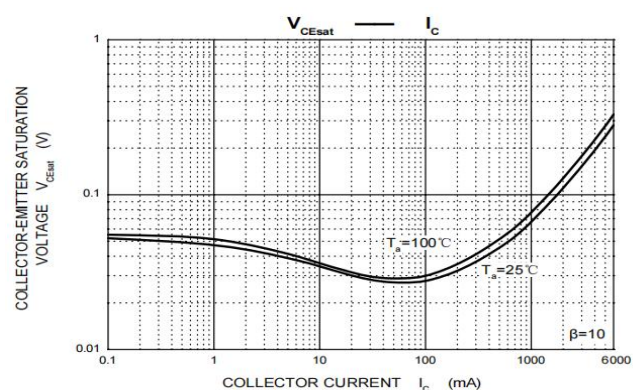
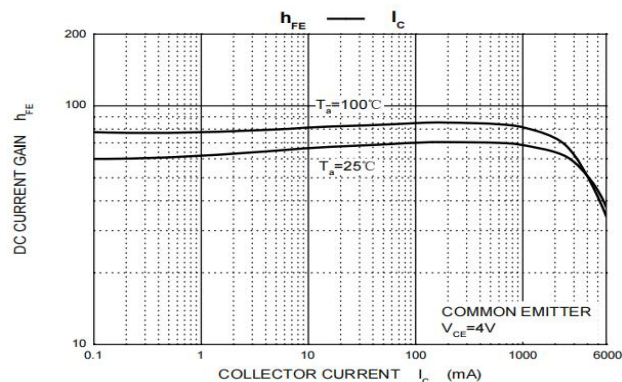
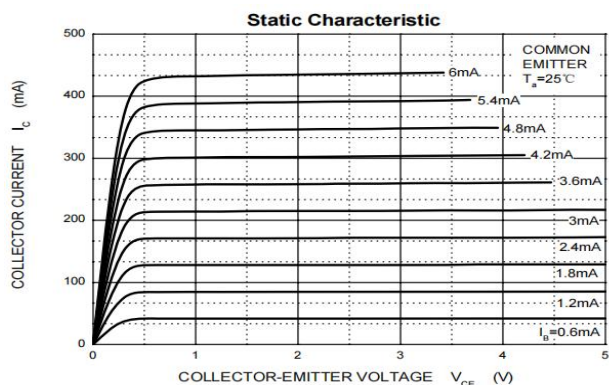
### Maximum Ratings at Ta=25°C unless otherwise specified

| Characteristics                                                             | Symbol    | Value       | Unit |
|-----------------------------------------------------------------------------|-----------|-------------|------|
| Collector Base Voltage                                                      | $V_{CBO}$ | 100         | V    |
| Collector Emitter Voltage                                                   | $V_{CEO}$ | 100         | V    |
| Emitter Base Voltage                                                        | $V_{EBO}$ | 5           | V    |
| Collector Current                                                           | $I_C$     | 6           | A    |
| Power Dissipation (Tc = 25 OC)<br>Superimposed on Rated Load (JEDEC method) | $P_{tot}$ | 2           | W    |
| Operating Temperature Range                                                 | $T_J$     | 150         | °C   |
| Storage Temperature Range                                                   | $T_{STG}$ | -55 to +150 | °C   |

### Electrical Characteristics(Ta=25°C)

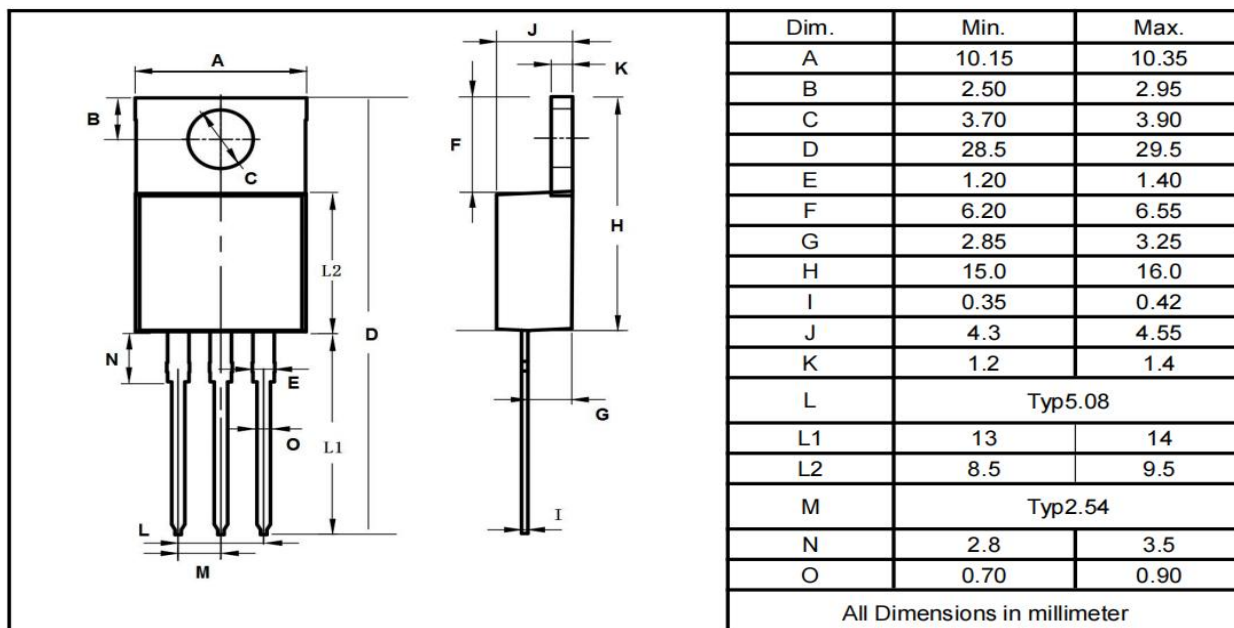
| Parameter                                                         | Symbol        | Min. | Typ. | Max. | Unit |
|-------------------------------------------------------------------|---------------|------|------|------|------|
| DC Current Gain<br>at $V_{CE} = 4V, I_C = 3A$                     | $h_{FE}$      | 15   | -    | 75   | -    |
| Collector Base Cutoff Current<br>at $V_{CB} = 100V$               | $I_{CBO}$     | -    | -    | 0.4  | mA   |
| Collector Emitter Cutoff Current<br>at $V_{CE} = 60V$             | $I_{CEO}$     | -    | -    | 0.7  | mA   |
| Emitter Base Cutoff Current<br>at $V_{EB} = 5V$                   | $I_{EBO}$     | -    | -    | 1    | mA   |
| Collector Emitter Saturation Voltage<br>at $I_C = 6A, I_B = 0.6A$ | $V_{CE(sat)}$ | -    | -    | 1.5  | V    |
| Base Emitter Saturation Voltage<br>at $I_C = 6A, V_{CE} = 4V$     | $V_{BE(on)}$  | -    | -    | 2    | V    |
| Transition Frequency<br>at $V_{CE} = 10V, I_C = 0.5A$             | $f_T$         | 3    | -    | -    | MHZ  |

## RATINGS AND CHARACTERISTIC CURVES

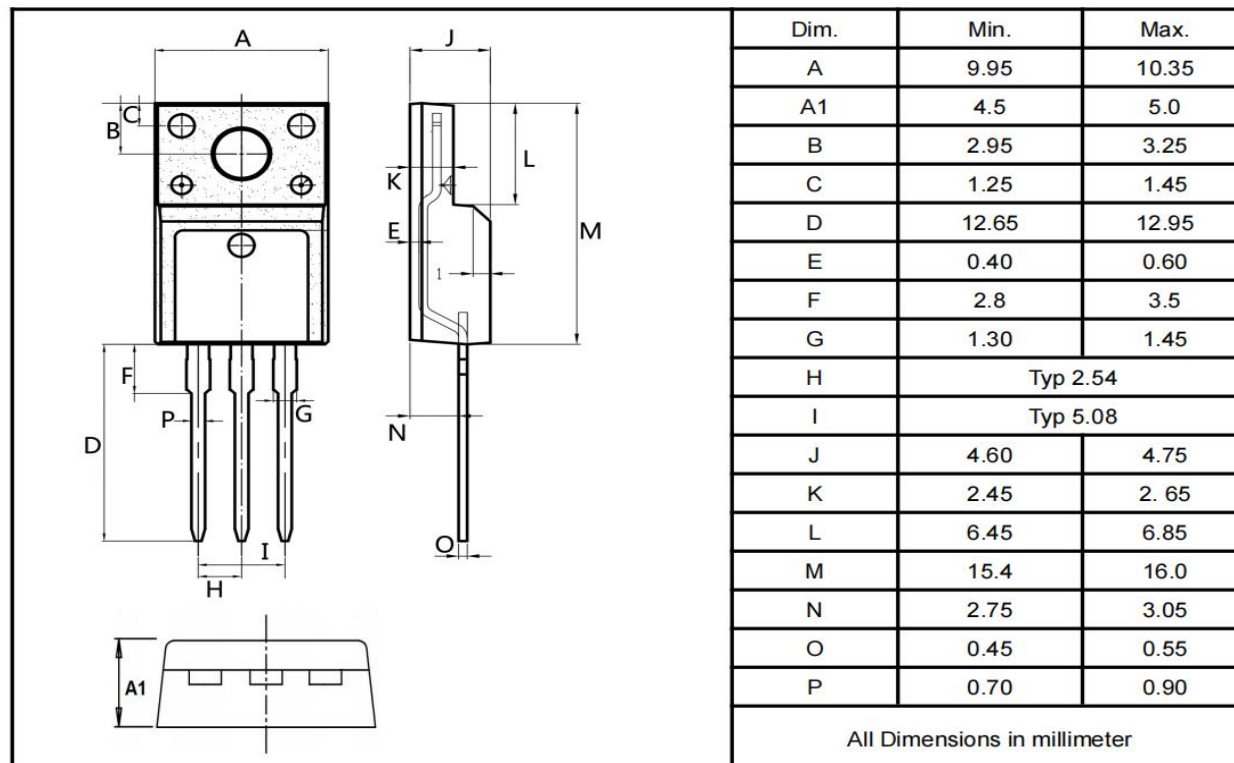


# Package Outline Dimensions millimeters

T0-220AB

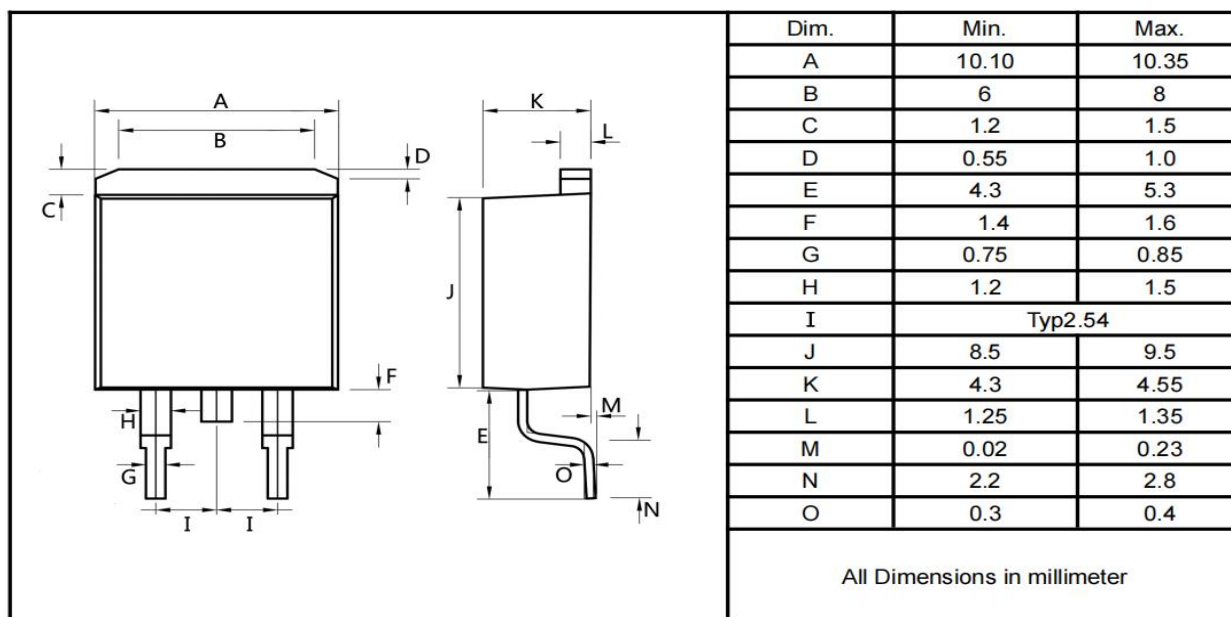


T0-220F

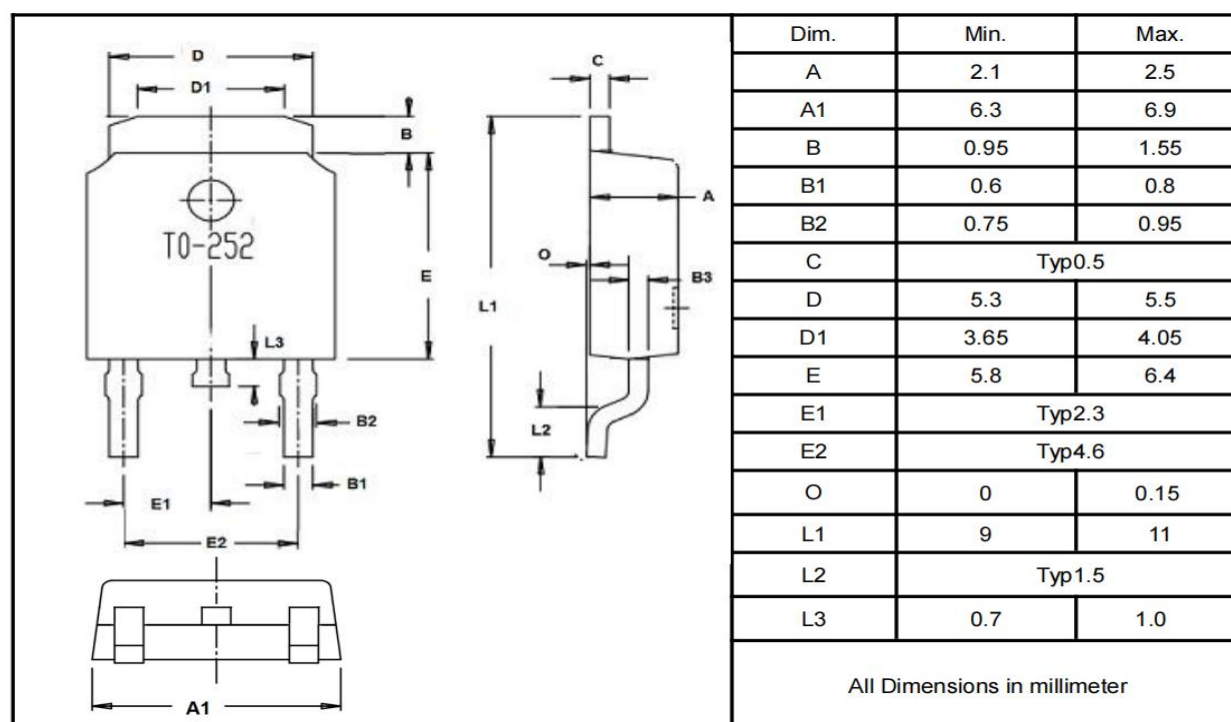


**Package Outline Dimensions millimeters**

T0-263

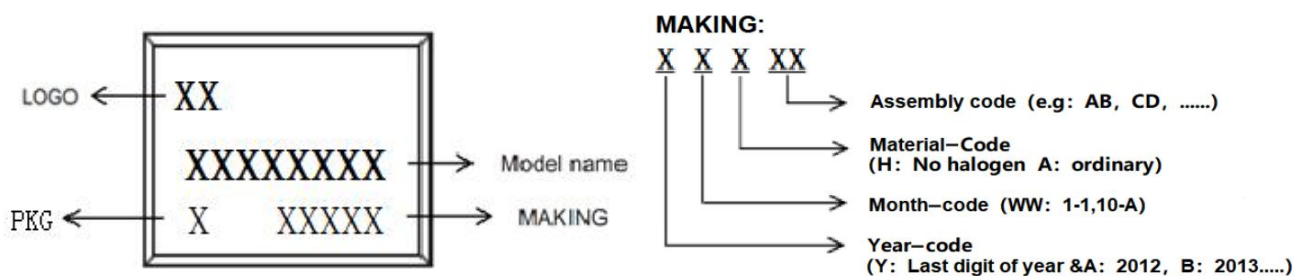


T0-252





## Marking on the body

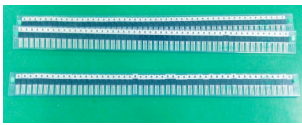


## Ordering information

| Part Number | Package  | Unit Weight    | Base Quantity   | Delivery mode               |
|-------------|----------|----------------|-----------------|-----------------------------|
| TIP41C      | TO-220AB | 0.07oz(1.96g)  | 50 pcs / tube   | 1000pcs/box 5000pcs/carton  |
| TIP41C      | TO-220F  | 0.06oz(1.74g)  | 50 pcs / tube   | 1000pcs/box 5000pcs/carton  |
| TIP41C      | TO-263   | 0.04oz(1.16g)  | 50 pcs / tube   | 1000pcs/box 5000pcs/carton  |
| TIP41C      | TO-263   | 0.04oz(1.16g)  | 800 pcs / reel  | 1600pcs/box 8000pcs/carton  |
| TIP41C      | TO-252   | 0.011oz(0.32g) | 2500 pcs / reel | 5000pcs/box 25000pcs/carton |

Note: For Halogen Free molding compound, add "H" suffix to part number above.

## packing instruction

| PKG                           | 最小包装                                                                                | 内盒                                                                                   | 外箱                                                                                    |
|-------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| TO-220AB<br>TO-220F<br>TO-263 |  |  |  |
|                               | 50pcs/管                                                                             | 1000pcs/盒                                                                            | 5000pcs/箱                                                                             |
| TO-263-R                      |  |   |  |
|                               | 800pcs/盘                                                                            | 1600pcs/盒                                                                            | 8000pcs/箱                                                                             |
| TO-252                        |  |   |  |
|                               | 2500pcs/盘                                                                           | 5000pcs/盒                                                                            | 25000pcs/箱                                                                            |

### Notice

1. All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.
2. Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
3. LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.