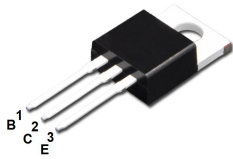
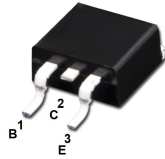


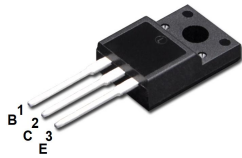
NPN Silicon Epitaxial Planar Transistor



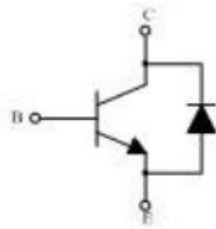
TO-220AB



TO-263



TO-220F



FEATURES

- High voltage
- High speed switching

APPLICATIONS

- High Speed Switching
- Suitable for Switching Regulator and Motor Control


RoHS
 COMPLIANT

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

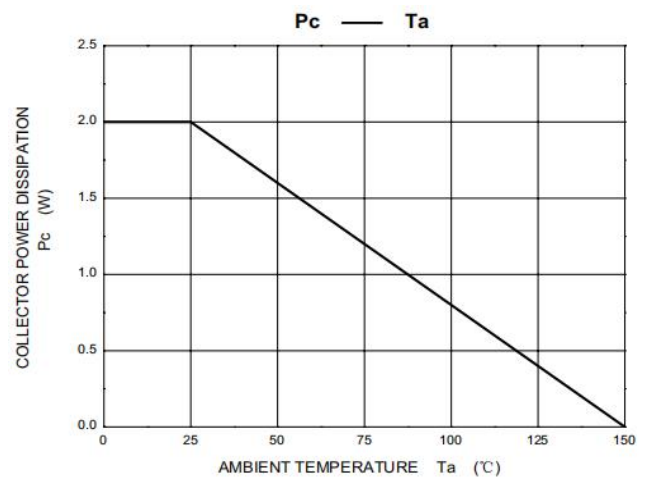
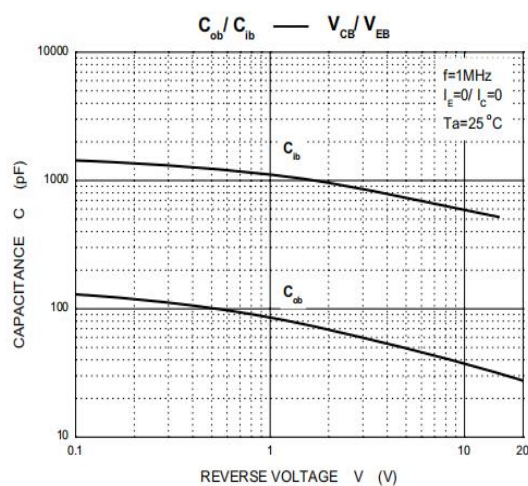
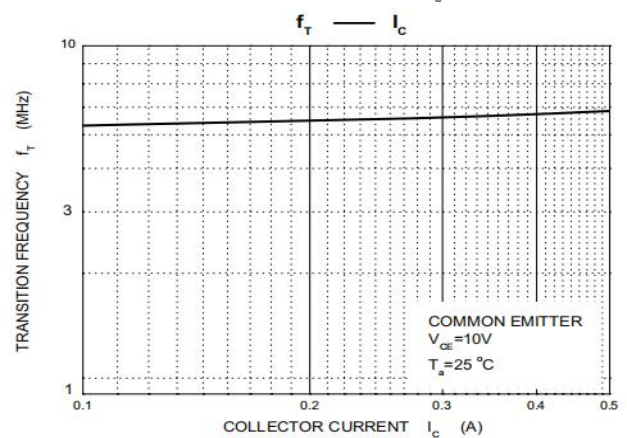
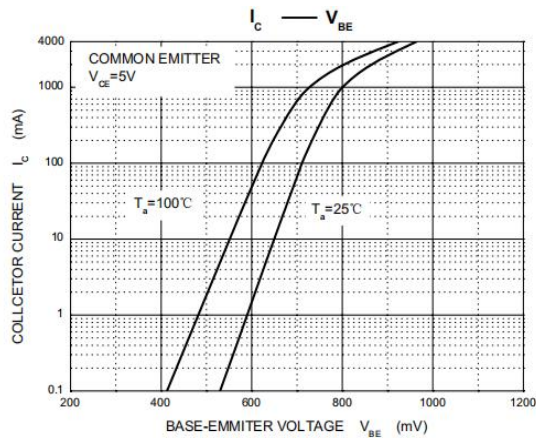
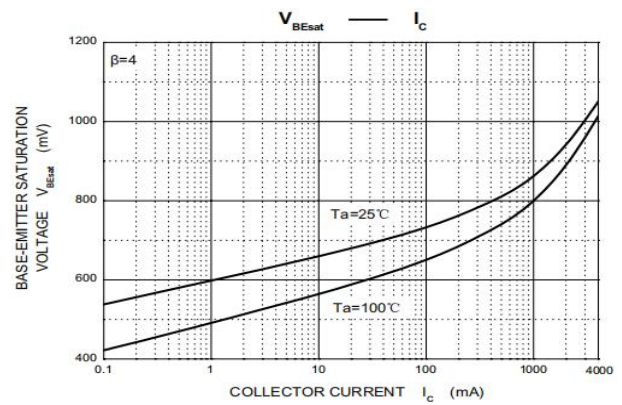
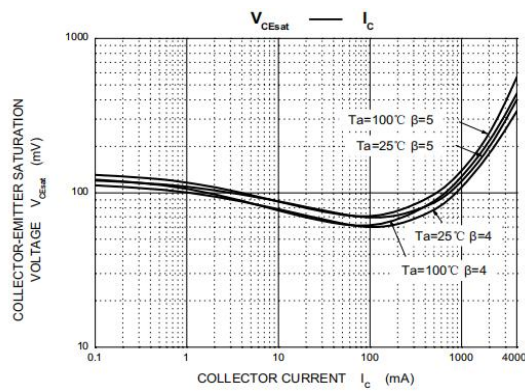
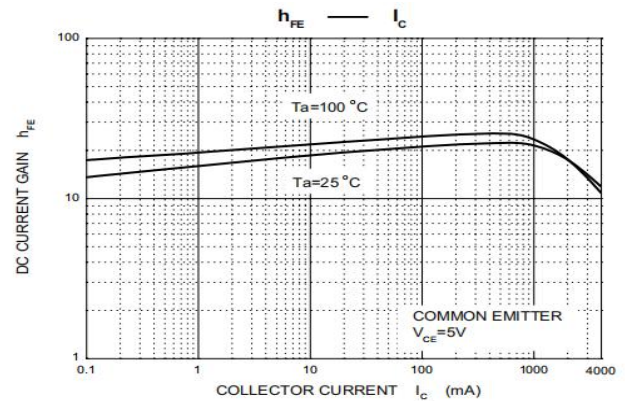
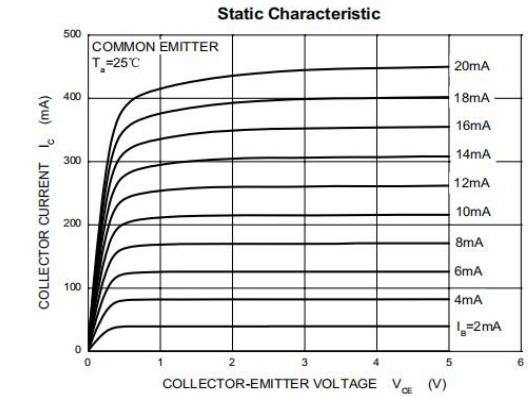
Maximum Ratings at Ta=25°C unless otherwise specified

| Characteristics | Symbol | Value | Unit |
|---|-----------------|-------------|------|
| Collector Base Voltage | V_{CBO} | 700 | V |
| Collector Emitter Voltage | V_{CEO} | 400 | V |
| Emitter Base Voltage | V_{EBO} | 9 | V |
| Collector Current | I_C | 4 | A |
| Thermal Resistance from Junction to Ambient | $R_{\theta JA}$ | 62.5 | °C/W |
| Power Dissipation ($T_c = 25^\circ\text{C}$) 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)

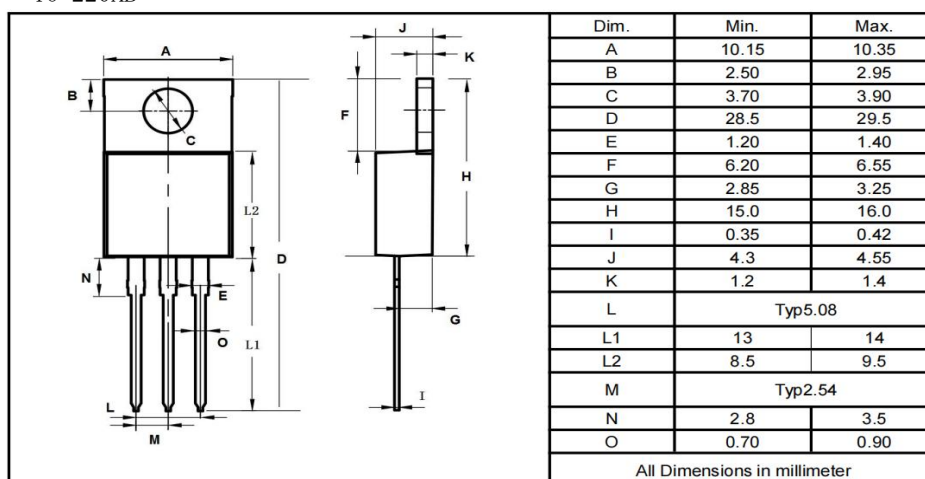
| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|--|---------------|------|------|------|---------------|
| DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 1\text{ A}$ | h_{FE} | 15 | - | 35 | - |
| Collector Base Cutoff Current at $V_{CB} = 700\text{ V}$ | I_{CBO} | - | - | 10 | μA |
| Collector Emitter Cutoff Current at $V_{CE} = 400\text{ V}$ | I_{CEO} | - | - | 10 | μA |
| Emitter Base Cutoff Current at $V_{EB} = 7\text{ V}$ | I_{EBO} | - | - | 10 | μA |
| Collector Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 0.4\text{ A}$ | $V_{CE(sat)}$ | - | - | 1 | V |
| Base Emitter Saturation Voltage at $I_C = 4\text{ A}$, $V_{CE} = 1\text{ V}$ | $V_{BE(sat)}$ | - | - | 0.8 | V |
| Transition Frequency at $V_{CE}=10\text{ V}$, $I_C=500\text{ mA}$, $f=1\text{ MHz}$ | f_T | 4 | - | - | MHZ |

RATINGS AND CHARACTERISTIC CURVES

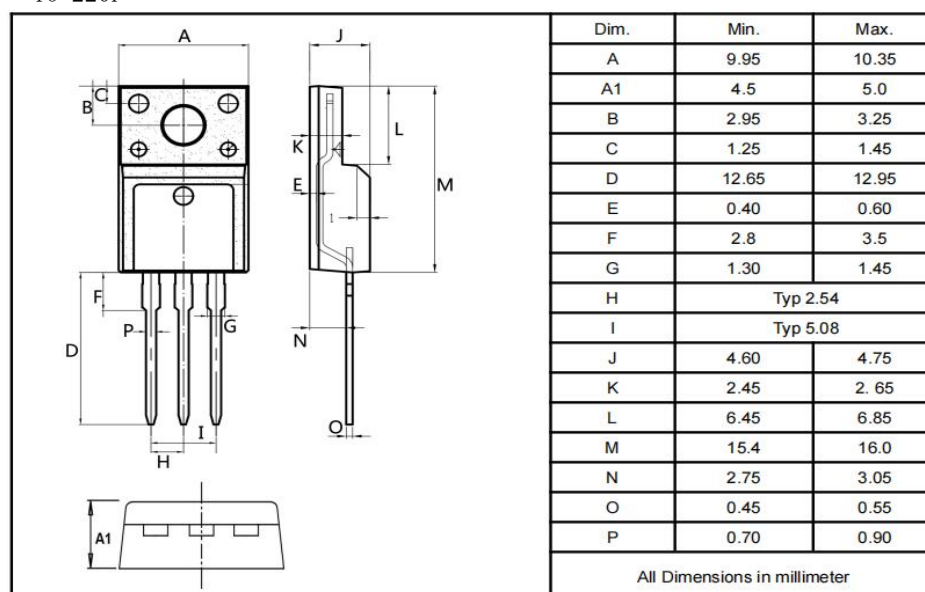


Package Outline Dimensions millimeters

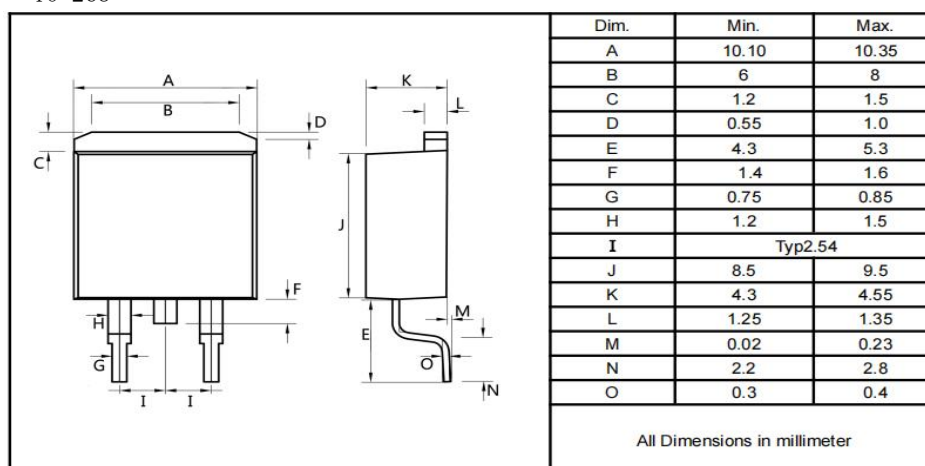
TO-220AB



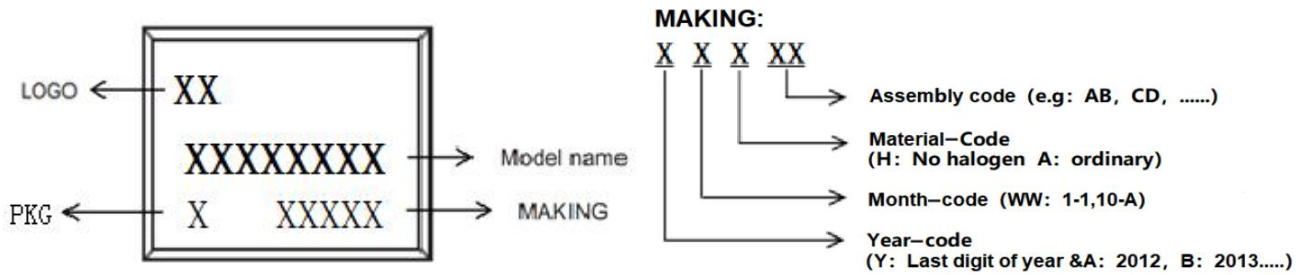
TO-220F



TO-263



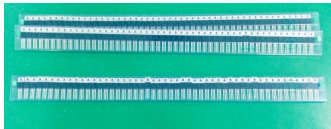
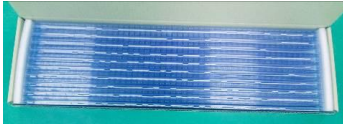




Marking on the body



Product specification classification

| Part Number | Package | Unit Weight | Base Quantity | Delivery mode |
|-------------|----------|---------------|----------------|----------------------------|
| LX13005A1 | TO-220AB | 0.07oz(1.96g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| LX13005A2 | TO-220F | 0.06oz(1.74g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| LX13005A3 | TO-263 | 0.04oz(1.16g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| LX13005A3-R | TO-263 | 0.04oz(1.16g) | 800 pcs / tube | 1600pcs/box 8000pcs/carton |

packing instruction

| PKG | 最小包装 | 内盒 | 外箱 |
|-------------------------------|---|--|---|
| TO-220AB TO-220F TO-263 |  |  |  |
| | 50pcs/管 | 1000pcs/盒 | 5000pcs/箱 |
| TO-263-R |  |  |  |
| | 800pcs/盘 | 1600pcs/盒 | 8000pcs/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.