



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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2SB1299

Silicon PNP epitaxial planar type

For power amplification

■ Features

- High forward current transfer ratio h_{FE}
- Satisfactory linearity of forward current transfer ratio h_{FE}
- Full-pack package which can be installed to the heat sink with one screw.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---------------------------------------|--------------------------------|-------------|------------------|
| Collector-base voltage (Emitter open) | V_{CBO} | -60 | V |
| Collector-emitter voltage (Base open) | V_{CEO} | -60 | V |
| Emitter-base voltage (Collector open) | V_{EBO} | -6 | V |
| Collector current | I_C | -3 | A |
| Peak collector current | I_{CP} | -6 | A |
| Base current | I_B | -1 | A |
| Collector power dissipation | $T_C = 25^\circ\text{C}$ P_C | 40 | W |
| | | 2 | |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

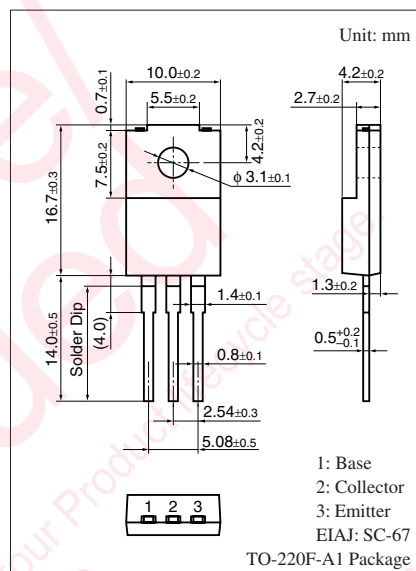
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

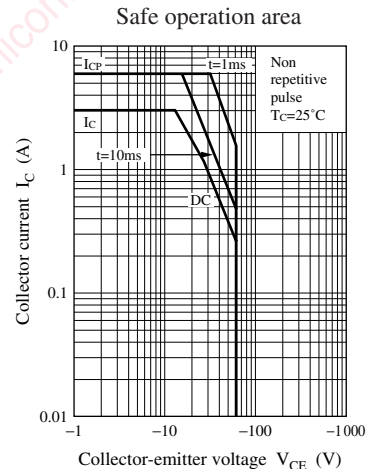
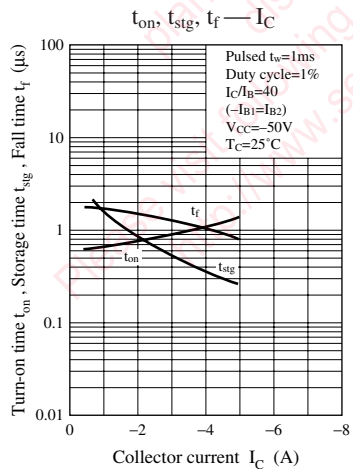
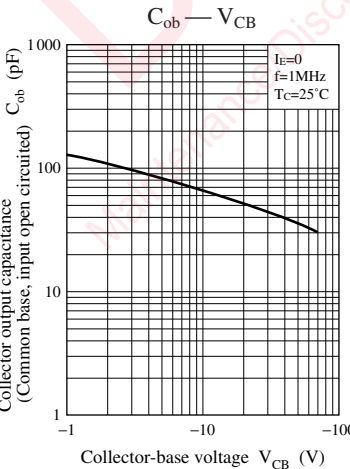
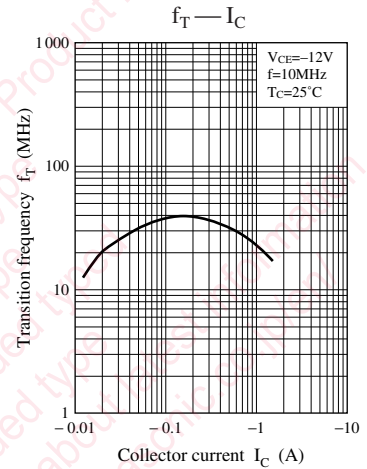
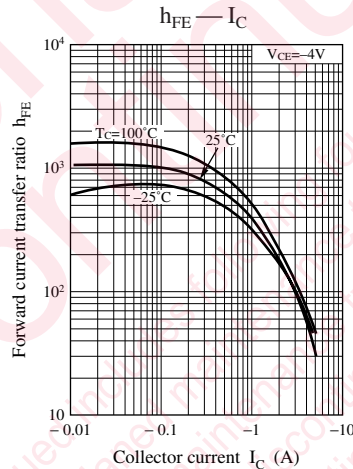
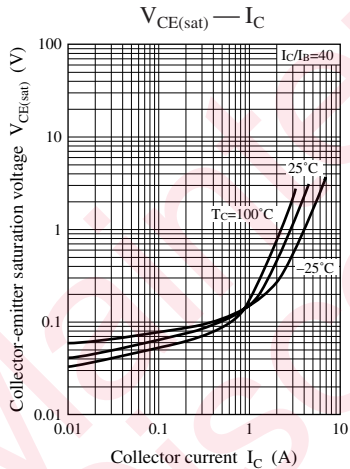
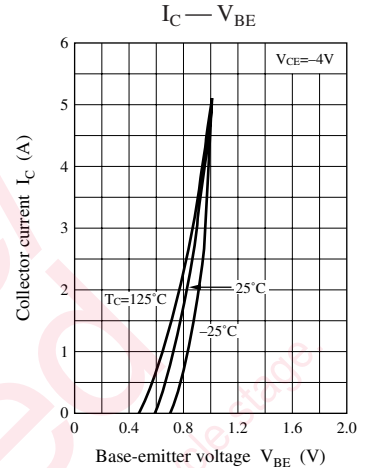
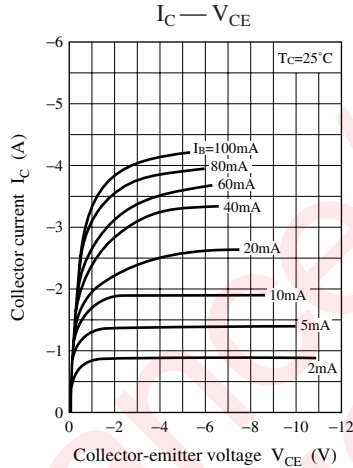
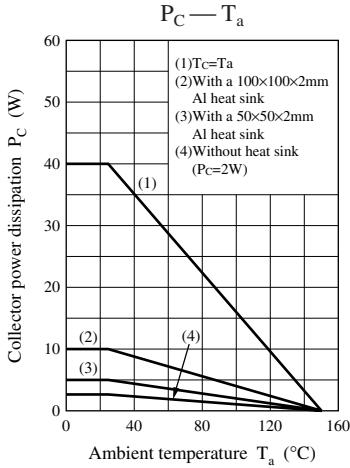
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--|---------------|--|-----|-----|------|---------------|
| Collector-emitter voltage (Base open) | V_{CEO} | $I_C = -25 \text{ mA}, I_B = 0$ | -60 | | | V |
| Collector-base cutoff current (Emitter open) | I_{CBO} | $V_{CB} = -60 \text{ V}, I_E = 0$ | | | -100 | μA |
| Collector-emitter cutoff current (Base open) | I_{CEO} | $V_{CE} = -40 \text{ V}, I_B = 0$ | | | -100 | μA |
| Emitter-base cutoff current (Collector open) | I_{EBO} | $V_{EB} = -6 \text{ V}, I_C = 0$ | | | -100 | μA |
| Forward current transfer ratio * | h_{FE} | $V_{CE} = -4 \text{ V}, I_C = -0.5 \text{ A}$ | 300 | | 700 | — |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -2 \text{ A}, I_B = -0.05 \text{ A}$ | | | -1 | V |
| Transition frequency | f_T | $V_{CE} = -12 \text{ V}, I_C = -0.2 \text{ A}, f = 10 \text{ MHz}$ | | 30 | | MHz |

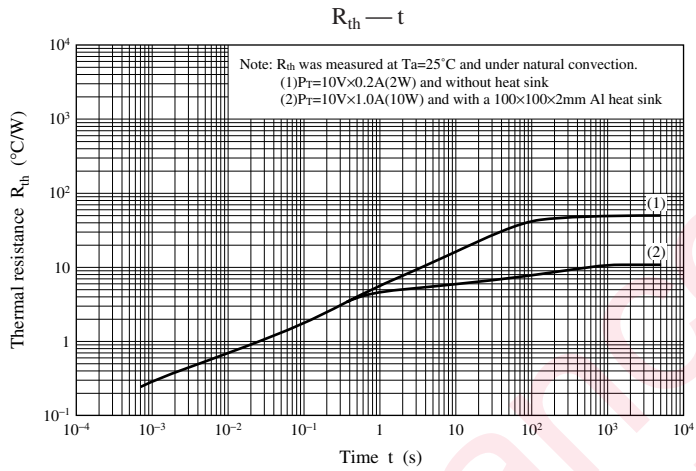
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

| Rank | Q | P |
|----------|------------|------------|
| h_{FE} | 300 to 500 | 400 to 700 |







Maintenance/Discontinued

includes following four Product lifecycle stage.

planned maintenance type

maintenance type

planned discontinued type

discontinued type

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