

查询"2SC4613"供应商

| | | |
|--------------|---------|--|
| SANYO | No.3707 | 2SA1769/2SC4613 |
| | | PNP/NPN Epitaxial Planar Silicon Transistors 160V/700mA Switching Applications |

Applications

- Color TV audio output, converter, inverter.

Features

- Adoption of MBIT processes.
- High breakdown voltage and large current capacity.
- Fast switching speed.

() : 2SA1769

Absolute Maximum Ratings at Ta = 25°C

| | | | unit |
|------------------------------|-----------|-------------|------|
| Collector-to-Base Voltage | V_{CBO} | (-)180 | V |
| Collector-to-Emitter Voltage | V_{CEO} | (-)160 | V |
| Emitter-to-Base Voltage | V_{EBO} | (-)6 | V |
| Collector Current | I_C | (-)0.7 | A |
| Collector Current (Pulse) | I_{CP} | (-)1.5 | A |
| Collector Dissipation | P_C | 1.5 | W |
| | | 10 | W |
| | | 150 | °C |
| Junction Temperature | T_j | | |
| Storage Temperature | T_{stg} | -55 to +150 | °C |

$T_c = 25^\circ C$

Electrical Characteristics at Ta = 25°C

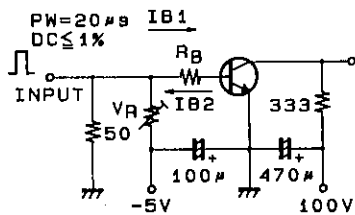
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|--------------------------|---------------|----------------------------------|---------|--------|--------|---------|
| Collector Cutoff Current | I_{CBO} | $V_{CB} = (-)120V, I_E = 0$ | | | (-)0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{CE} = (-)4V, I_C = 0$ | | | (-)0.1 | μA |
| DC Current Gain | $h_{FE}(1)$ | $V_{CE} = (-)5V, I_C = (-)100mA$ | 100* | | 400* | |
| | $h_{FE}(2)$ | $V_{CE} = (-)5V, I_C = (-)10mA$ | 90 | | | |
| Gain-Bandwidth Product | f_T | $V_{CE} = (-)10V, I_C = (-)50mA$ | | 120 | | MHz |
| C-E Saturation Voltage | $V_{CE(sat)}$ | $I_C = (-)250mA, I_B = (-)25mA$ | | 0.12 | 0.4 | V |
| | | | | (-0.2) | (-0.5) | |
| B-E Saturation Voltage | $V_{BE(sat)}$ | $I_C = (-)250mA, I_B = (-)25mA$ | (-)0.85 | (-)1.2 | | V |
| C-B Breakdown Voltage | $V_{(BR)CBO}$ | $I_C = (-)10\mu A, I_E = 0$ | (-)180 | | | V |
| C-E Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = (-)1mA, R_{BE} = \infty$ | (-)160 | | | V |
| E-B Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = (-)10\mu A, I_C = 0$ | (-)6 | | | V |

* : The 2SA1769/2SC4613 are classified by 100mA h_{FE} as follows.

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| | | |
|-----------|-----------|-----------|
| 100 R 200 | 140 S 280 | 200 T 400 |
|-----------|-----------|-----------|

Switching Time Test Circuit

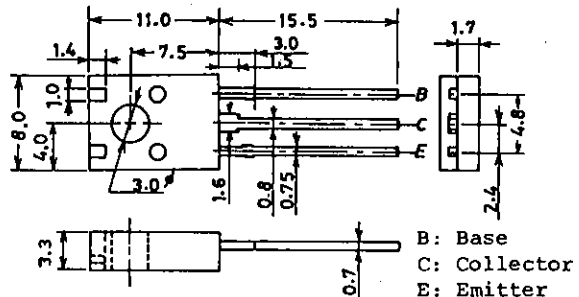


$2Q_{IB1} = -20I_{B2} = I_C = 300mA$
(For PNP, the polarity is reversed).

Unit (Resistance : Ω , Capacitance : F)

Package Dimensions 2042A

(unit : mm)



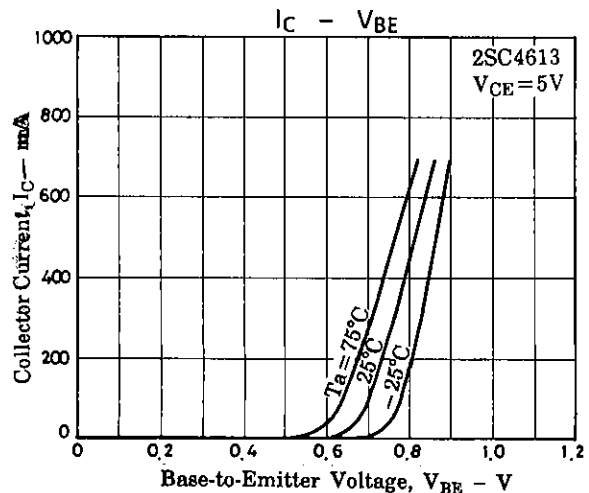
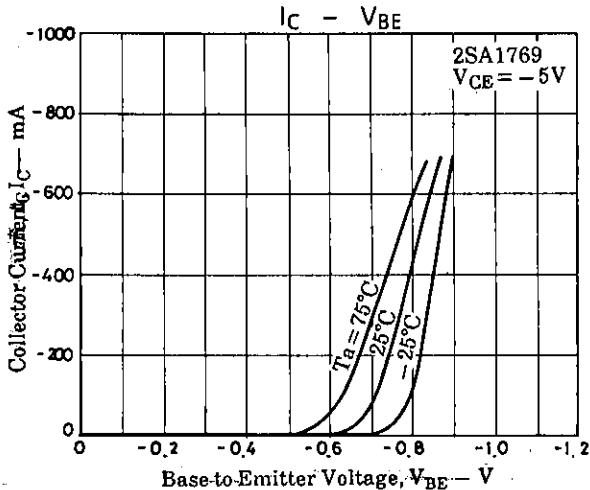
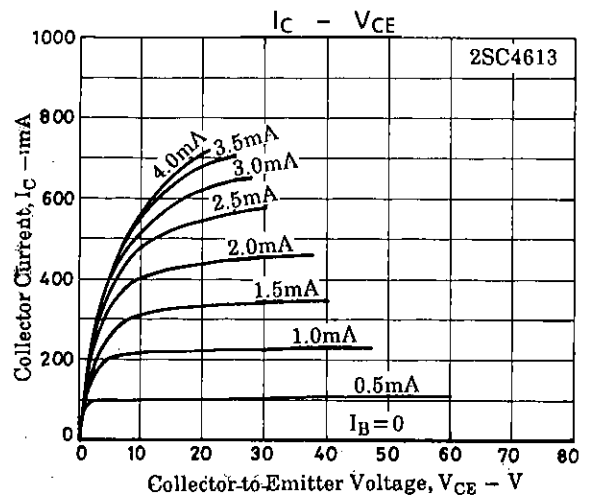
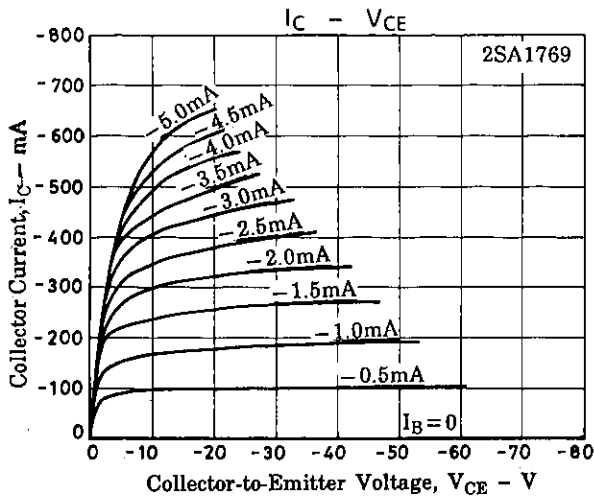
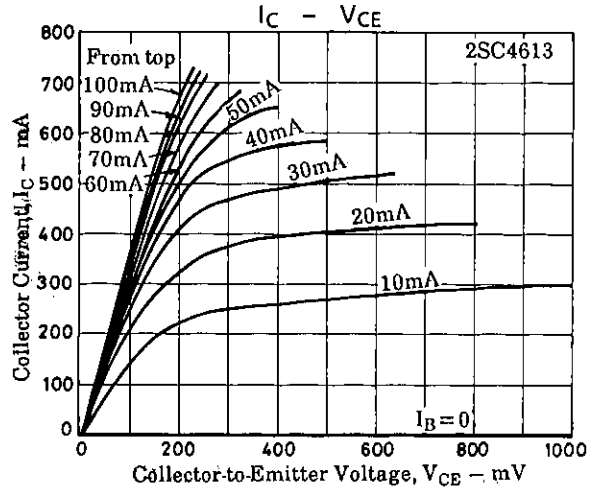
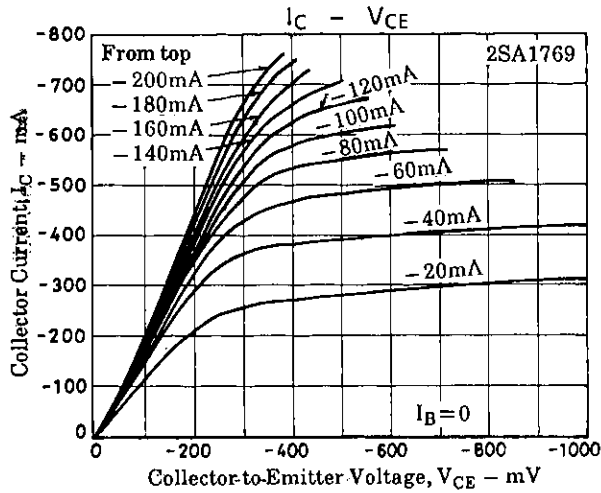
B: Base
C: Collector
E: Emitter

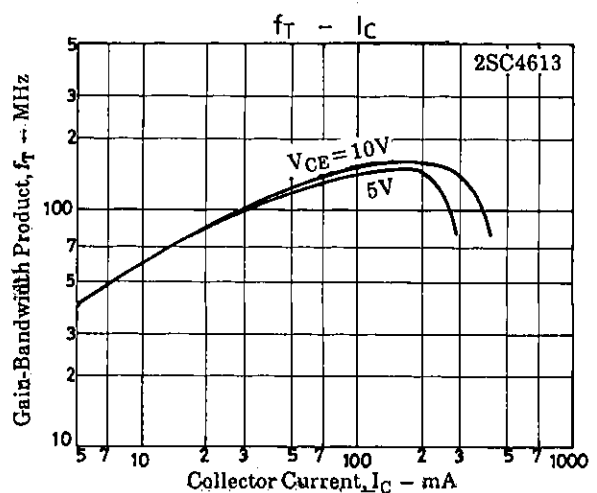
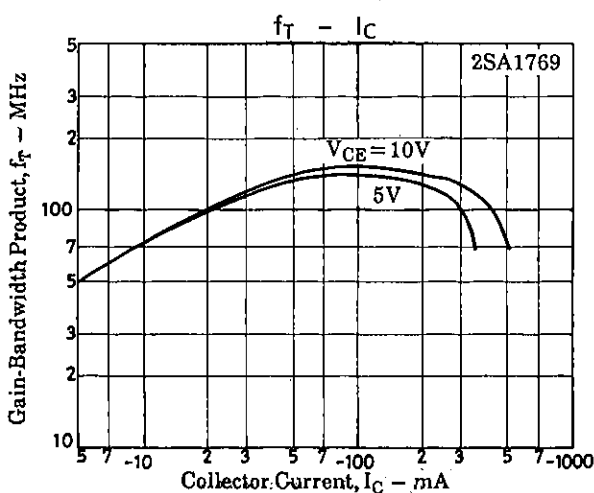
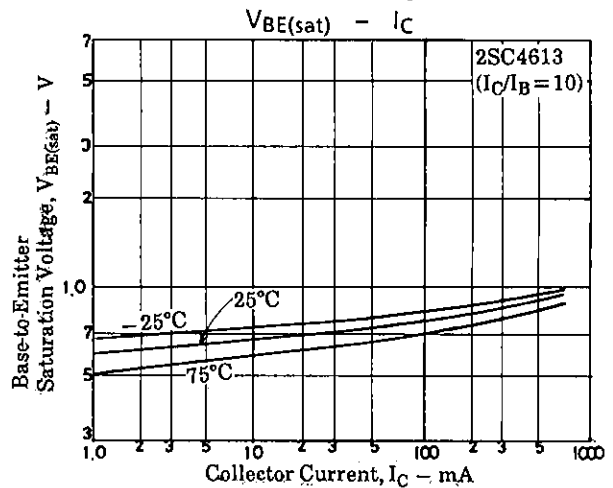
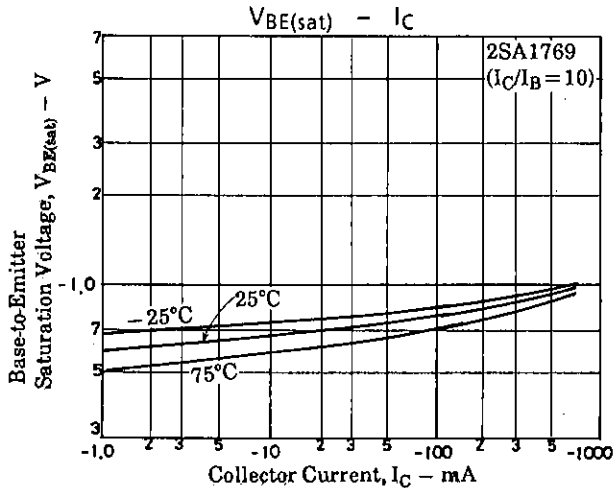
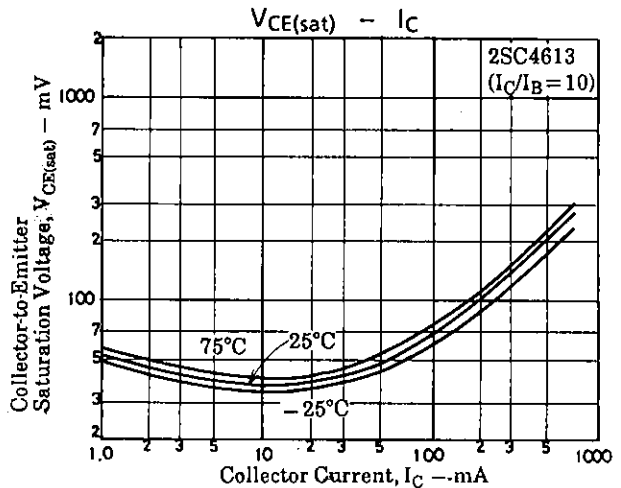
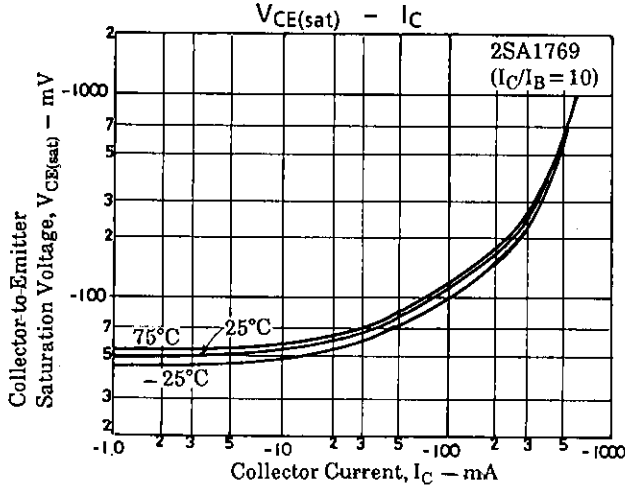
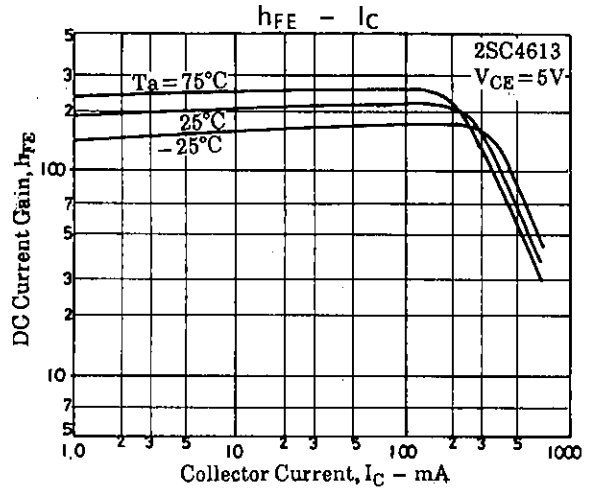
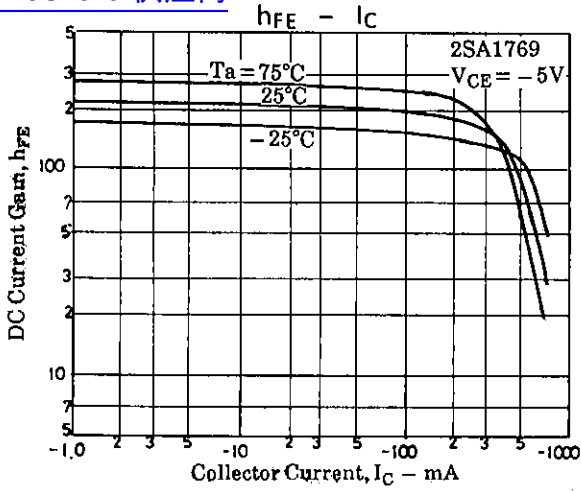
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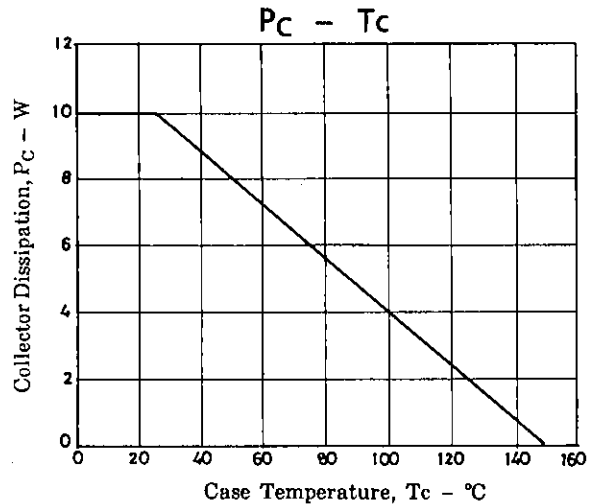
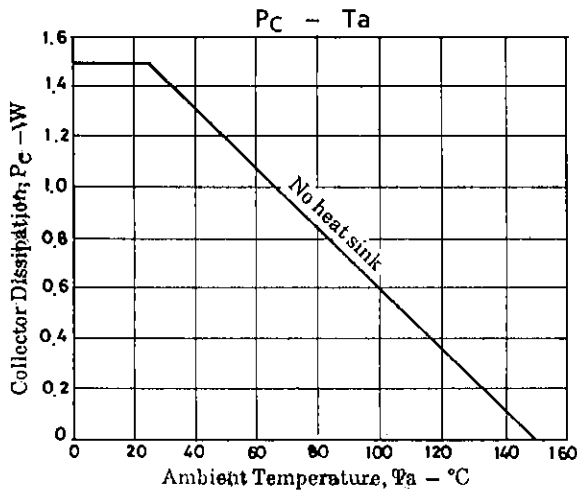
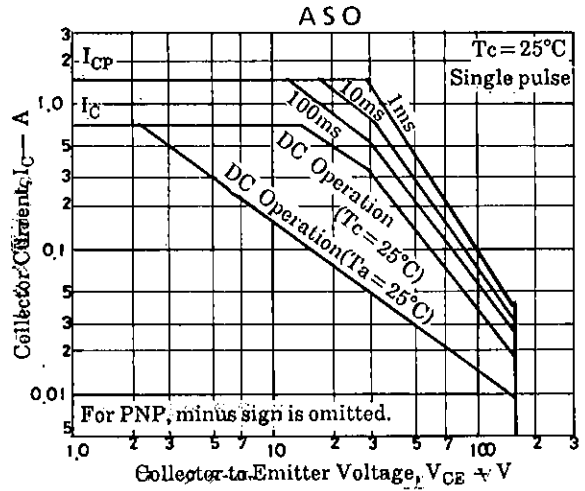
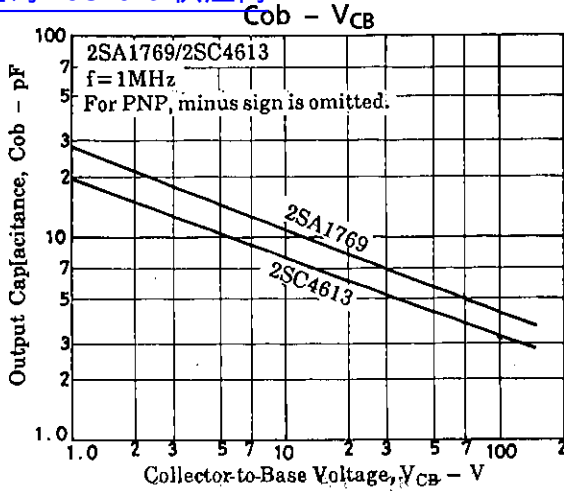
| | | | min | typ | max | unit |
|--------------------|-----------|-----------------------------|-----|-------|-----|------|
| Output Capacitance | C_{ob} | $V_{CB} = (-)10V, f = 1MHz$ | | 8 | | pF |
| Turn-ON Time | t_{on} | See specified Test Circuit. | | (11) | | pF |
| Storage Time | t_{stg} | ◇ | | 50 | | ns |
| Fall Time | t_f | ◇ | | (60) | | ns |
| | | | | 1000 | | ns |
| | | | | (900) | | ns |
| | | | | 60 | | ns |
| | | | | (60) | | ns |





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