

3CD020,3CD030,3CD050**PNP Silicon Low Frequency High Power Transistor****Features:**

1. Heavy output current.Small saturation voltage drop. Good temperature stability.
2. Implementation of standards: GJB33 A-97, QZJ840611A, QZJ840611.
3. Use for power amplify, Low-speed switch, power adjustment.
4. Quality Class: JP, JT, JCT, GS, G, G+.

TECHNICAL DATA:**(Ta = 25°C)**

| Parameter name | Symbols | Unit | Specifications | | | | | | | |
|--|----------------------|------|---|----|--|----------------------------|-----|---|-----|-----|
| | | | 3CD020 | | 3CD030 | | | 3CD050 | | |
| | | | A | B | C | D | E | F | G | H |
| Collector-Emitter Voltage | V _{CEO} | V | 30 | 50 | 80 | 110 | 150 | 200 | 250 | 300 |
| Collector-Emitter Breakdown Voltage | V _{(BR)CEO} | V | 30 | 50 | 80 | 110 | 150 | 200 | 250 | 300 |
| | | | 3CD020: I _c =1mA | | 3CD030: I _c =1mA | | | 3CD050: I _c =10mA | | |
| Emitter-Base Voltage | V _{EBO} | V | 4 | | 4 | | | 4 | | |
| Max. Collector Current | I _{CM} | A | 2 | | 3 | | | 5 | | |
| Max. Collector Dissipation | P _{CM} | W | 20 (T _c ≤75°C) | | 30 (T _c ≤75°C) | | | 50 (T _c ≤75°C) | | |
| Junction Temperature | T _{jm} | °C | 175 | | | | | | | |
| Storage Temperature | T _{stg} | °C | -55~+175 | | | | | | | |
| C-E Leakage Current | I _{CEO} | mA | 1 (V _{CE} =50V) | | | 2.0 (V _{CE} =50V) | | | | |
| Collector- Emitter Saturation Voltage Drop | V _{CE(sat)} | V | 1.5 | | 1.5 | | | 1.5 | | |
| | | | (A~E:I _c =1.0A,I _B =0.2A; F~H:I _c =0.5A,I _B =0.1A) | | (A~E:I _c =1.5A,I _B =0.3A; F~H:I _c =0.75A,I _B =0.15A) | | | (A~E:I _c =2.5A,I _B =0.5A; F~H:I _c =1.2A,I _B =0.24A) | | |
| DC Current Gain | h _{FE} | | Max.:180, Min.:7 | | Max.:180, Min.:7 | | | Max.:180, Min.:7 | | |
| | | | (A~E: V _{CE} =5V, I _c =1.0A; F~H:V _{CE} =5V, I _c =0.5A) | | (A~E:V _{CE} =5V,I _c =1.5A; F~H:V _{CE} =5V, I _c =0.75A) | | | (A~E: V _{CE} =5V, I _c =2.5A; F~H:V _{CE} =5V, I _c =1.2A) | | |
| E-B Breakdown Voltage | V _{(BR)EBO} | V | ≥4 (I _E =1mA) | | ≥4 (I _E =1mA) | | | ≥4 (I _E =2mA) | | |

h_{FE} Colored:

| Color | Brown | Red | Orange | Yellow | Green | Blue | Purple |
|-----------------|-------|-------|--------|--------|-------|--------|---------|
| h _{FE} | 7~15 | 15~25 | 25~40 | 40~55 | 55~80 | 80~120 | 120~180 |

Outline and Dimensions: