

2SC3440

FOR HIGH CURRENT DRIVE APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC3440 is a super mini silicon NPN epitaxial transistor designed with high collector current, small VCE(sat).

Complementary with 2SA1365.

FEATURE

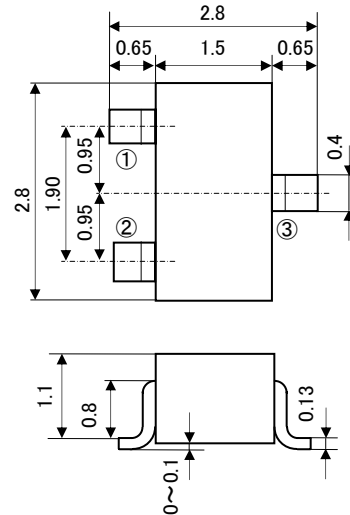
- Low collector to emitter saturation voltage
VCE(sat)=0.2V typ
- Excellent linearity of DC forward current gain.
- Super mini package for easy mounting
- High collector current ICM=1000mA
- High gain band with product fT=180MHz typ

APPLICATION

Small type motor drive, relay drive, power supply

OUTLINE DRAWING

Unit: mm



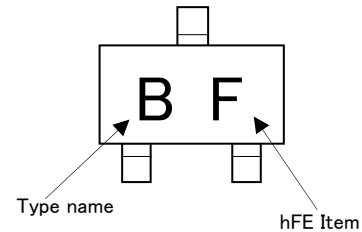
TERMINAL CONNECTER

- ①: BASE JEITA: SC-59
- ②: EMITTER JEDEC: Similar to TO-236
- ③: COLLECTOR

MAXIMUM RATINGS(Ta=25°C)

| Parameter | Symbol | Ratings | Unit |
|------------------------------|------------------|----------|------|
| Collector to Base voltage | V _{CBO} | 25 | V |
| Emitter to Base voltage | V _{EBO} | 4 | V |
| Collector to Emitter voltage | V _{CEO} | 20 | V |
| Collector current | I _C | 700 | mA |
| Peak collector current | I _{CM} | 1000 | mA |
| Collector dissipation | P _c | 200 | mW |
| Junction temperature | T _j | +150 | °C |
| Storage temperature | T _{stg} | -55~+150 | °C |

MARKING



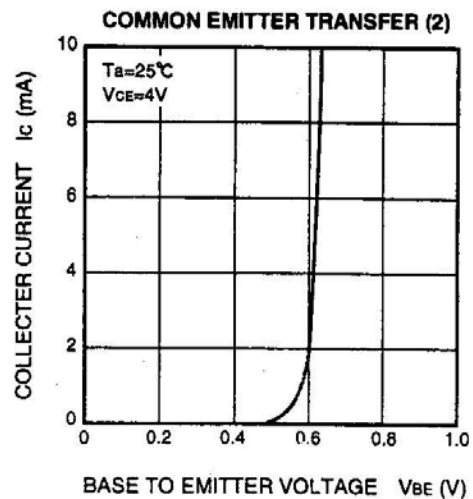
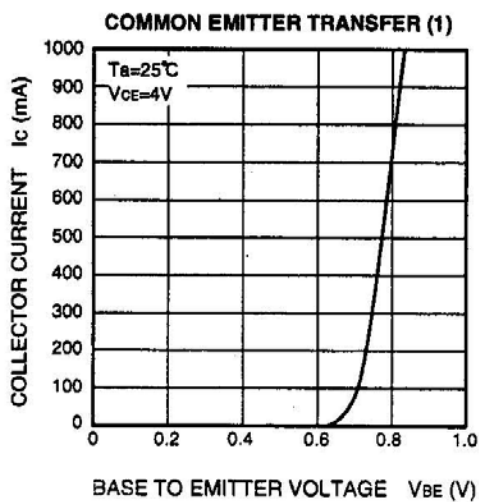
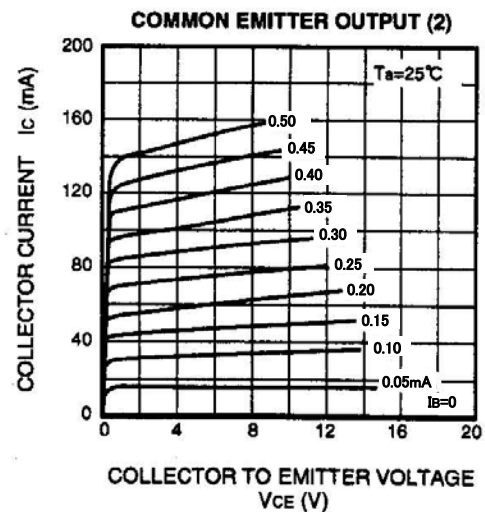
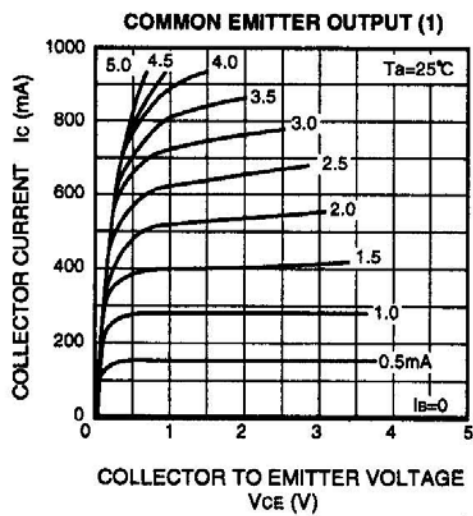
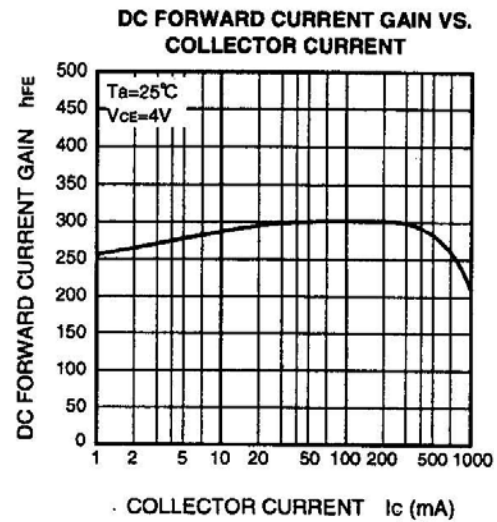
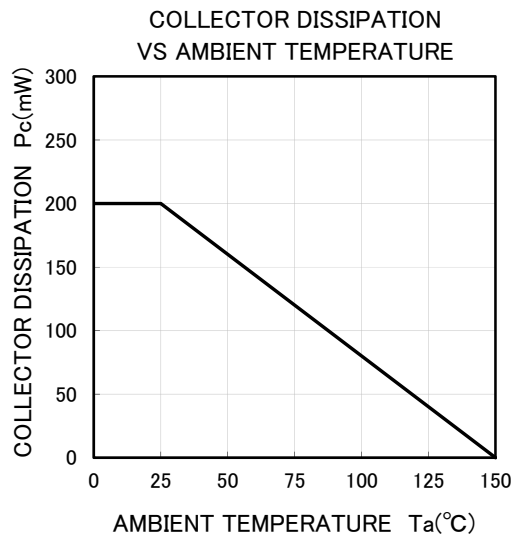
ELECTRICAL CHARACTERISTICS(Ta=25°C)

| Parameter | Symbol | Test conditions | Limits | | | Unit |
|---------------------------|----------------------|---|--------|-----|-----|------|
| | | | Min | Typ | Max | |
| C to B breakdown voltage | V(BR) _{CBO} | I _C =10 μA, I _E =0mA | 25 | — | — | V |
| E to B breakdown voltage | V(BR) _{EBO} | I _E =10 μA, I _C =0mA | 4 | — | — | V |
| C to E breakdown voltage | V(BR) _{CEO} | I _C =100 μA, R _{BE} =∞ | 20 | — | — | V |
| Collector cut off current | I _{CBO} | V _{CB} =25V, I _E =0mA | — | — | 1 | μA |
| Emitter cut off current | I _{EBO} | V _{EB} =2V, I _C =0mA | — | — | 1 | μA |
| DC forward current gain * | hFE | V _{CE} =4V, I _C =100mA | 150 | — | 800 | — |
| C to E Saturation Voltage | VCE(sat) | I _C =500mA, I _B =25mA | — | 0.2 | 0.5 | V |
| Gain bandwidth product | fT | V _{CE} =6V, I _E =-10mA | — | 180 | — | MHz |

※: It shows hFE classification at right table.

| Item | E | F | G |
|------|---------|---------|---------|
| hFE | 150~300 | 250~500 | 400~800 |

TYPICAL CHARACTERISTICS





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