

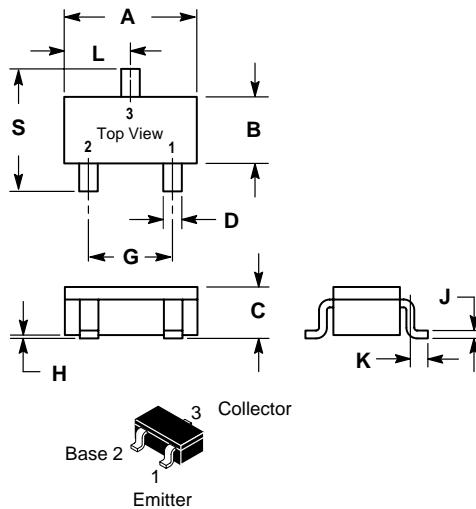
RoHS Compliant Product

FEATURES

- Low Cob.
Cob=4.0pF
- Complements the 2SC4617

STRUCTURE

- Epitaxial planar type
- PNP Silicon Teansistor



| SOT-523 | | |
|---------------------|------|------|
| Dim | Min | Max |
| A | 1.50 | 1.70 |
| B | 0.78 | 0.82 |
| C | 0.80 | 0.82 |
| D | 0.28 | 0.32 |
| G | 0.90 | 1.10 |
| H | 0.00 | 0.10 |
| J | 0.10 | 0.20 |
| K | 0.35 | 0.41 |
| L | 0.49 | 0.51 |
| S | 1.50 | 1.70 |
| All Dimension in mm | | |

● **Absolute maximum** (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|-----------------------------|------------------|----------|------|
| Collector-base voltage | V _{CB0} | -60 | V |
| Collector-emitter voltage | V _{CEO} | -50 | V |
| Emitter-base voltage | V _{EBO} | -6 | V |
| Collector current | I _c | -0.15 | A |
| Collector power dissipation | P _c | 0.15 | W |
| Junction temperature | T _j | 150 | °C |
| Storage temperature | T _{stg} | -55~+150 | °C |

● **Electrical characteristics** (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|--------------------------------------|----------------------|------|------|------|------|--|
| Collector-base breakdown voltage | BV _{CB0} | -60 | - | - | V | I _c =-50μA |
| Collector-emitter breakdown voltage | BV _{CEO} | -50 | - | - | V | I _c =-1uA |
| Emitter-base breakdown voltage | BV _{EBO} | -7 | - | - | V | I _E =-50μA |
| Collector cutoff current | I _{cBO} | - | - | -0.1 | μA | V _{CB} =-60V |
| Emitter cutoff current | I _{EBO} | - | - | -0.1 | μA | V _{EB} =-6V |
| DC current transfer ratio | h _{FE} | 120 | - | 560 | - | V _{CE} =-6V, I _c =-1mA |
| Collector-emitter saturation voltage | V _{CE(sat)} | - | - | -0.5 | V | I _c /I _B =-50mA/-5mA |
| Transition frequency | f _r | - | 140 | - | MHz | V _{CE} =-12V, I _E =-2mA, f=30MHz |
| Output capacitance | Cob | - | 4.0 | 5.0 | pF | V _{CE} =-12V, I _E =0A, f=1MHz |

h_{FE} values are classified as follows :

| Item | Q | R | S |
|-----------------|---------|---------|---------|
| h _{FE} | 120~270 | 180~390 | 270~560 |
| Marking | FQ | FR | FS |

● Electrical characteristic curves

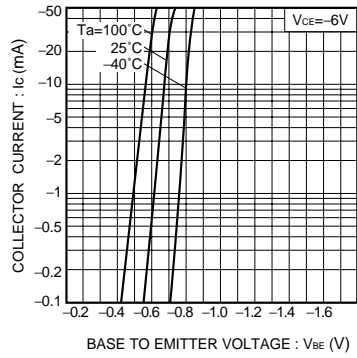


Fig.1 Grounded emitter propagation characteristics

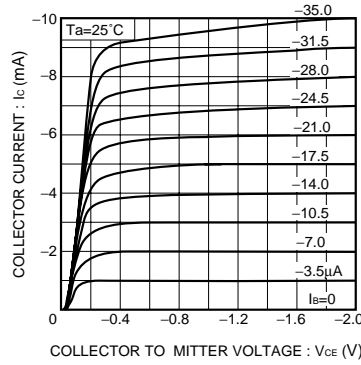


Fig.2 Grounded emitter output characteristics (I)

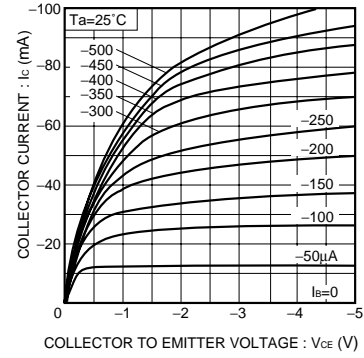


Fig.3 Grounded emitter output characteristics (II)

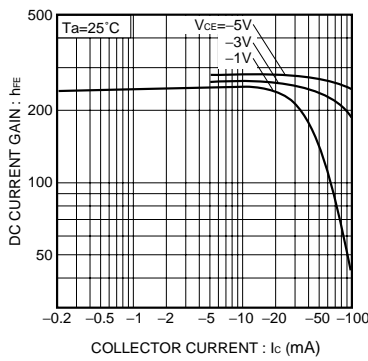


Fig.4 DC current gain vs. collector current (I)

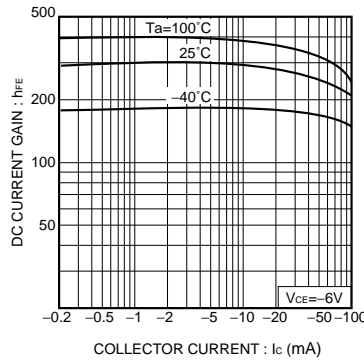


Fig.5 DC current gain vs. collector current (II)

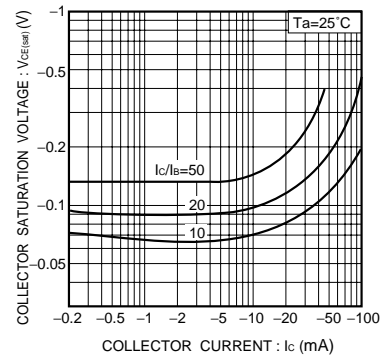


Fig.6 Collector-emitter saturation voltage vs. collector current (I)

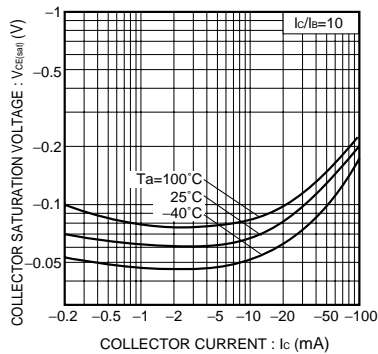


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

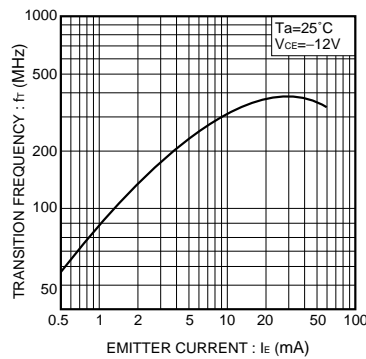


Fig.8 Gain bandwidth product vs. emitter current

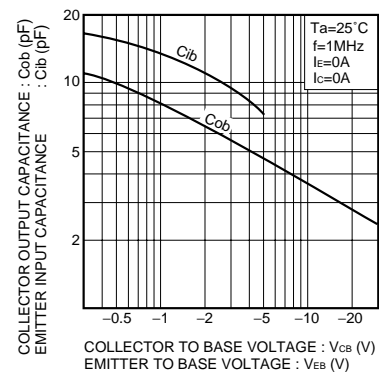


Fig.9 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage