

2SA1491

Silicon PNP Epitaxial Planar Transistor

☆ Complement to type 2SQ3855

Application Example :
Audio and General Purpose

● Outline Drawing 2 MT-100(TO3P)

Absolute Maximum Ratings (Ta=25°C)

| Symbol | 2SA1491 | Unit |
|------------------|-----------------------------|------|
| V _{CB0} | -140 | V |
| V _{CE0} | -140 | V |
| V _{EB0} | -6 | V |
| I _c | -10 | A |
| I _b | -4 | A |
| P _c | 100 (T _c = 25°C) | W |
| T _j | 150 | °C |
| T _{stg} | -55 to +150 | °C |

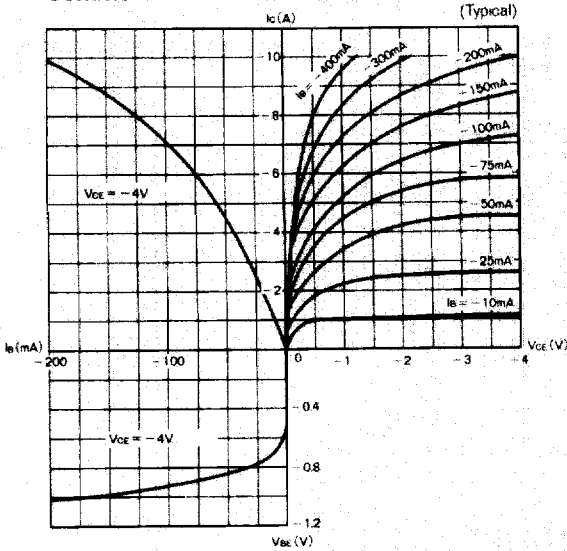
Electrical Characteristics (Ta=25°C)

| Symbol | Conditions | 2SA1491 | Unit |
|----------------------|---|---------|------|
| I _{CB0} | V _{CB} = -140V | -100max | μA |
| I _{EB0} | V _{EB} = -6V | -100max | μA |
| V _{IBRCE0} | I _c = -50mA | -140min | V |
| h _{FE} | V _{CE} = -4V, I _c = -3A | 50min | |
| V _{CE(sat)} | I _c = -5A, I _b = -0.5A | -2.0max | V |
| f _T | V _{CE} = -12V, I _E = 0.5A | 20typ | MHz |

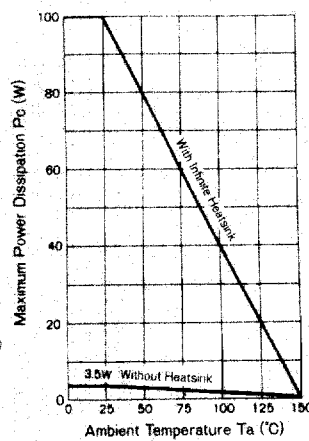
Typical Switching Characteristics (Common Emitter)

| V _{CC} (V) | R _L (Ω) | I _c (A) | V _{BB1} (V) | V _{BB2} (V) | I _{b1} (A) | I _{b2} (A) | t _{on} (μs) | t _{stg} (μs) | t _f (μs) |
|---------------------|--------------------|--------------------|----------------------|----------------------|---------------------|---------------------|----------------------|-----------------------|---------------------|
| -60 | 12 | -5 | -10 | 5 | -0.5 | 0.5 | 0.3typ | 0.9typ | 0.2typ |

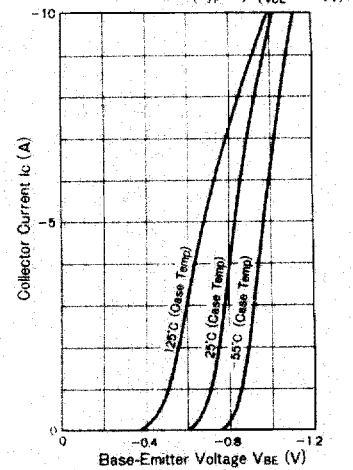
Common Emitter Characteristics



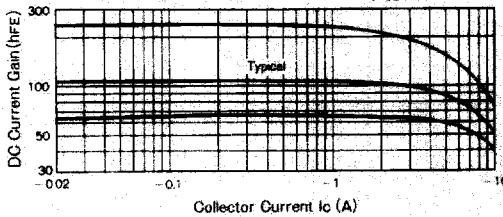
P_c-T_a Derating



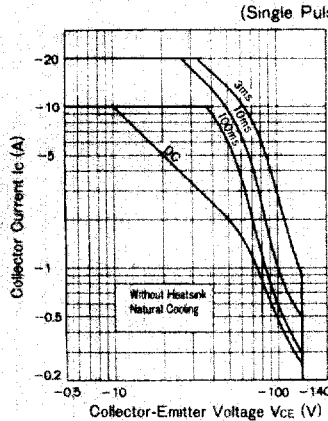
I_c-V_{BE} Temperature Characteristics



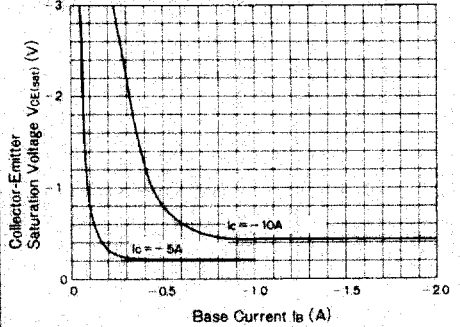
h_{FE}-I_c Characteristics



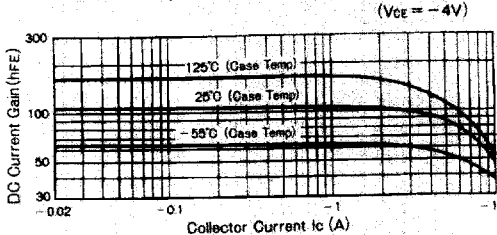
Safe Operating Area (SOA)



V_{CE(sat)} - I_b Characteristics



h_{FE}-I_c Temperature Characteristics



θ_{ja}-t Characteristics

