

2SC4386

Silicon NPN Triple Diffused Planar

T-33-13

☆ Complement to type 2SA1671

Application Example:
Audio and General Purpose

● Outline Drawing 5FM100

Absolute Maximum Ratings (Ta=25°C)

| Symbol | 2SC4386 | Unit |
|------------------|---------------------------|------|
| V _{CB0} | 160 | V |
| V _{CE0} | 120 | V |
| V _{EB0} | 6 | V |
| I _C | 8 | A |
| I _B | 3 | A |
| P _C | 75 (T _C =25°C) | W |
| T _J | 150 | °C |
| T _{stg} | -55~+150 | °C |

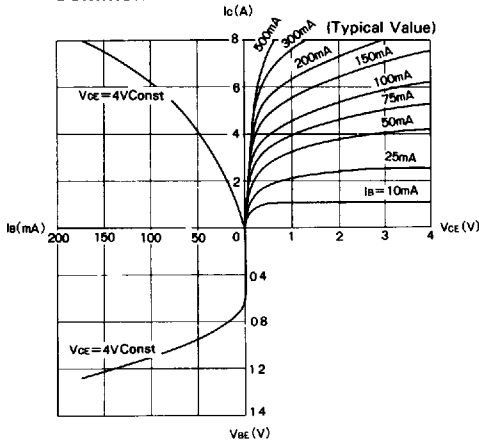
Electrical Characteristics (Ta=25°C)

| Symbol | Conditions | 2SC4386 | Unit |
|----------------------|---|---------|------|
| I _{CB0} | V _{CB} =160V | 10max | μA |
| I _{EB0} | V _{EB} =6V | 10max | μA |
| V _{(BR)CEO} | I _C =50mA | 120min | V |
| h _{FE} | V _{CE} =4V, I _C =3A | 50min | |
| V _{CE(sat)} | I _C =3A, I _B =0.3A | 1.5max | V |
| f _T | V _{CE} =12V, I _E =-0.5A | 20typ | MHz |

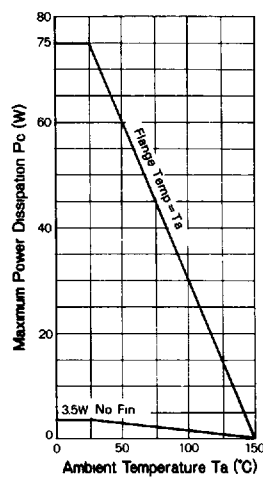
Typical Switching Characteristics (Common Emitter)

| 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) |
|---------------------|--------------------|--------------------|----------------------|----------------------|---------------------|---------------------|----------------------|-----------------------|---------------------|
| 40 | 10 | 4 | 10 | -5 | 0.4 | -0.4 | 0.3typ | 3.4typ | 0.4typ |

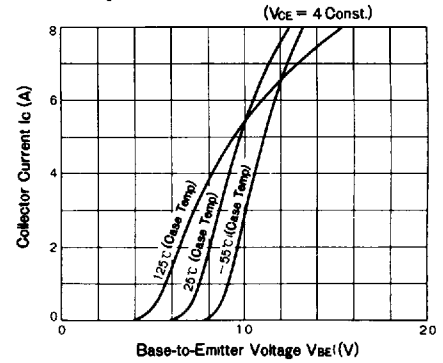
Common Emitter Characteristics



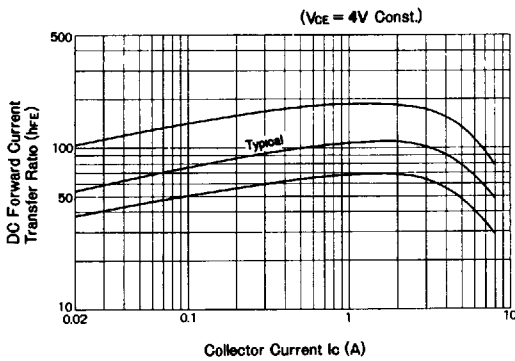
Power Derating



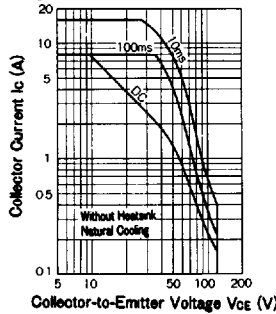
Temperature Characteristics



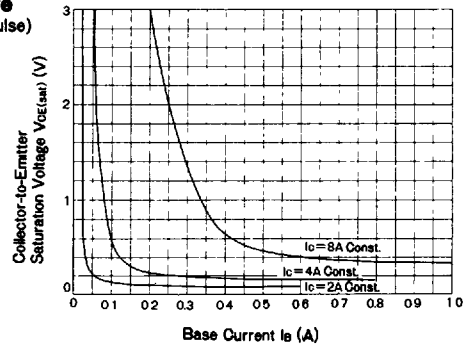
DC Current Gain Characteristics



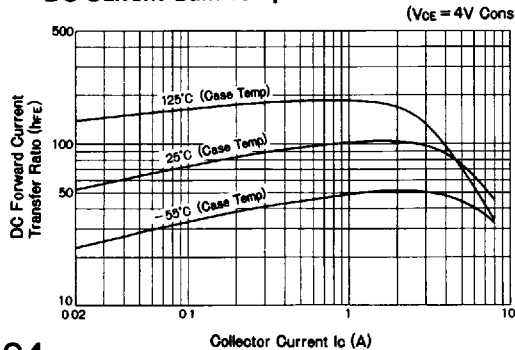
Maximum Areas For Safe Operation (ASO) (Single Pulse)



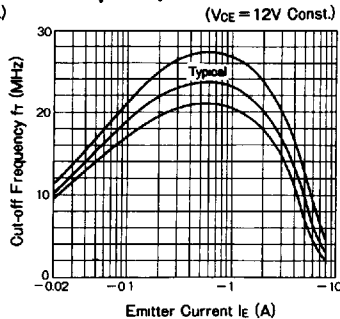
VCE(sat) - IB Characteristics (Typical Value)



DC Current Gain Temperature Characteristics



Frequency Characteristics



Transient Thermal Resistance Characteristics

