

2SC5100

参考資料

シリコンNPN三重拡散プレーナ型トランジスタ (2SA1908とコンプリメンタリ)

用途：オーディオ、一般用

絶対最大定格 (Ta = 25)

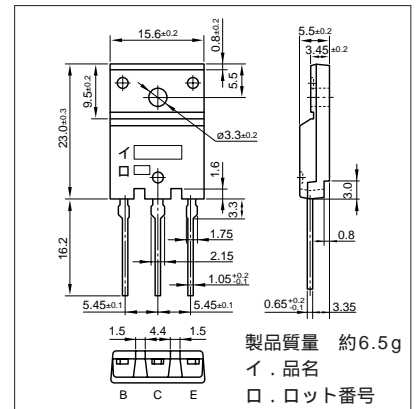
| 記号 | 規格値 | 単位 |
|------------------|--------------------------|----|
| V _{CB0} | 160 | V |
| V _{CEO} | 120 | V |
| V _{EB0} | 6 | V |
| I _C | 8 | A |
| I _B | 3 | A |
| P _C | 75(T _C = 25) | W |
| T _j | 150 | |
| T _{stg} | - 55 ~ + 150 | |

電気的特性 (Ta = 25)

| 記号 | 試験条件 | 規格値 | 単位 |
|----------------------|--|--------|-----|
| 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 | 0.5max | V |
| f _T | V _{CE} = 12V, I _E = - 0.5A | 20typ | MHz |
| C _{OB} | V _{CB} = 10V, f = 1MHz | 200typ | pF |

ランク O(50 ~ 100), P(70 ~ 140), Y(90 ~ 180)

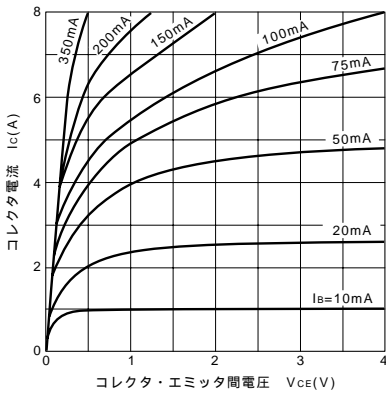
外形図 FM100(T03PF)



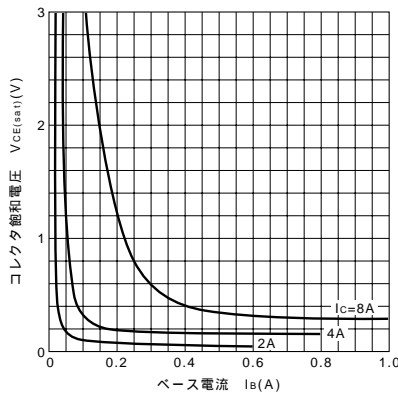
代表的スイッチング特性 (エミッタ接地)

| 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 | 0.13typ | 3.50typ | 0.32typ |

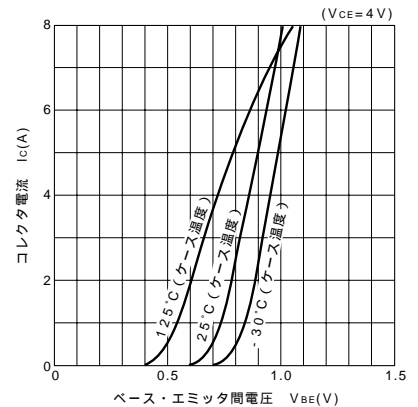
I_C-V_{CE}特性 (代表例)



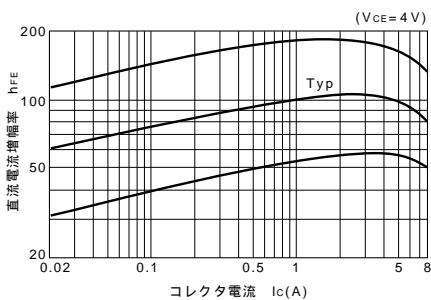
V_{CE(sat)}-I_B特性 (代表例)



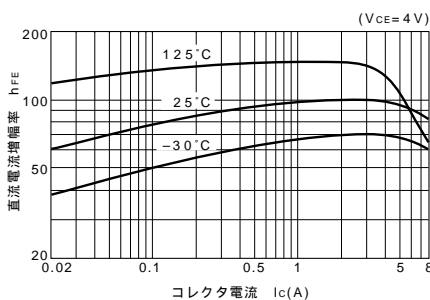
I_C-V_{BE}温度特性 (代表例)



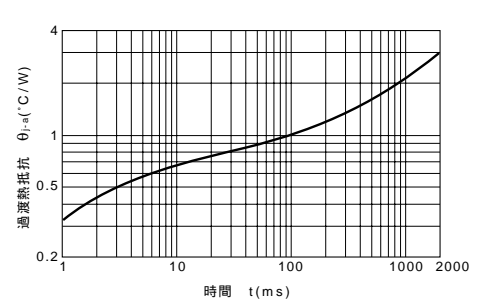
h_{FE}-I_C特性 (代表例)



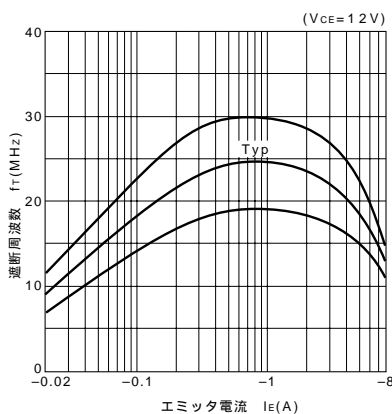
h_{FE}-I_C温度特性 (代表例)



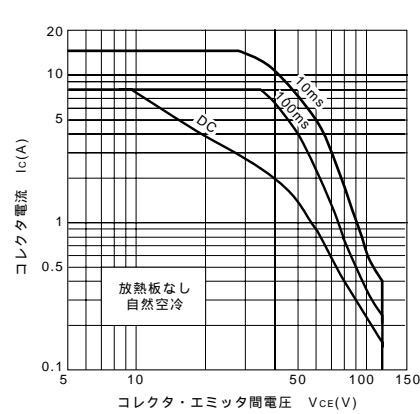
θ_{j-a}-t特性



f_T-I_E特性 (代表例)



ASO曲線 (単発パルス)



P_C-T_a定格

