

2SC3179

Silicon NPN Triple Diffused Planar Transistor (Complement to type 2SA1262)

Application : Audio and General Purpose

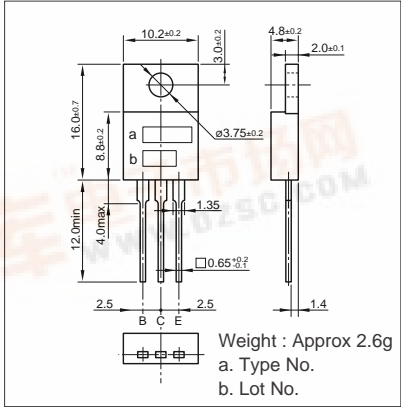
■ Absolute maximum ratings (Ta=25°C)

| Symbol | 2SC3179 | Unit |
|------------------|--------------------------|------|
| V _{CB0} | 80 | V |
| V _{CE0} | 60 | V |
| V _{EB0} | 6 | V |
| I _C | 4 | A |
| I _B | 1 | A |
| P _C | 30(T _C =25°C) | W |
| T _J | 150 | °C |
| T _{stg} | -55 to +150 | °C |

■ Electrical Characteristics (Ta=25°C)

| Symbol | Conditions | 2SC3179 | Unit |
|----------------------|---|---------|------|
| I _{CB0} | V _{CB} =80V | 100max | μA |
| I _{EB0} | V _{EB} =6V | 100max | μA |
| V _{(BR)CEO} | I _C =25mA | 60min | V |
| h _{FE} | V _{CE} =4V, I _C =1V | 40min | |
| V _{CE(sat)} | I _C =2A, I _B =0.2A | 0.6max | V |
| f _T | V _{CE} =12V, I _E =-0.2A | 15typ | MHz |
| COB | V _{CB} =10V, f=1MHz | 60typ | pF |

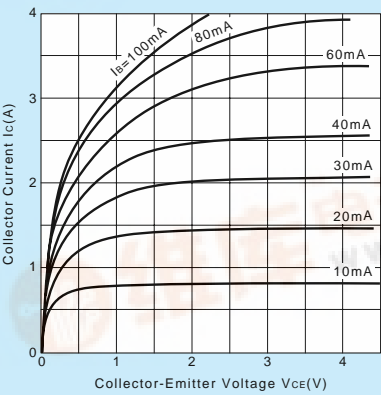
External Dimensions MT-25(TO220)



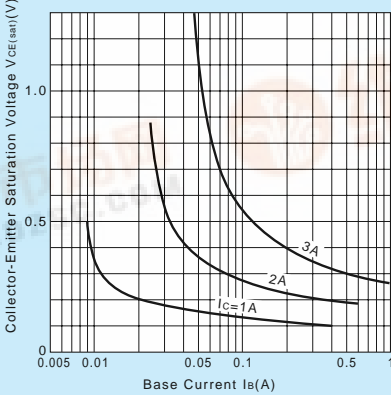
■ Typical Switching Characteristics (Common Emitter)

| V _{CC} (V) | R _L (Ω) | I _C (A) | V _{BB1} (V) | V _{BB2} (V) | I _{B1} (mA) | I _{B2} (mA) | t _{on} (μs) | t _{stg} (μs) | t _f (μs) |
|------------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|------------------------|
| 20 | 10 | 2 | 10 | -5 | 200 | -200 | 0.2typ | 1.9typ | 0.29typ |

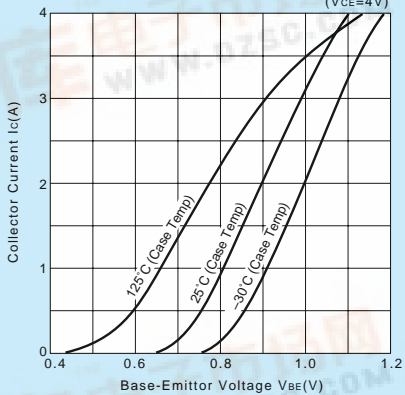
I_C-V_{CE} Characteristics (Typical)



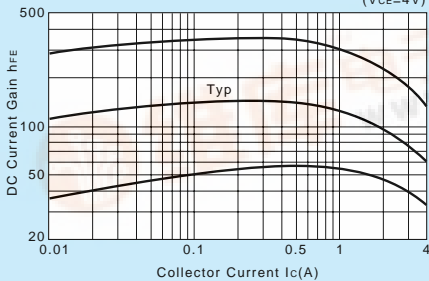
V_{CE(sat)}-I_B Characteristics (Typical)



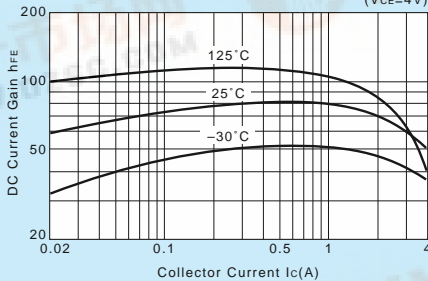
I_C-V_{BE} Temperature Characteristics (Typical)



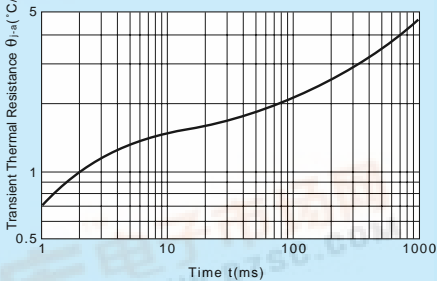
h_{FE}-I_C Characteristics (Typical)



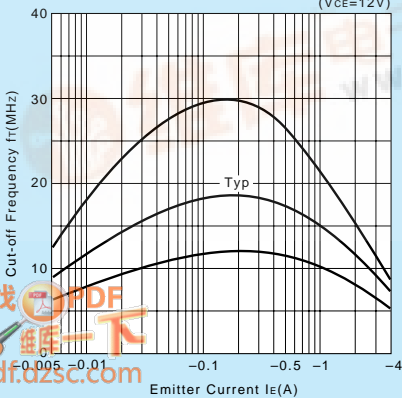
h_{FE}-I_C Temperature Characteristics (Typical)



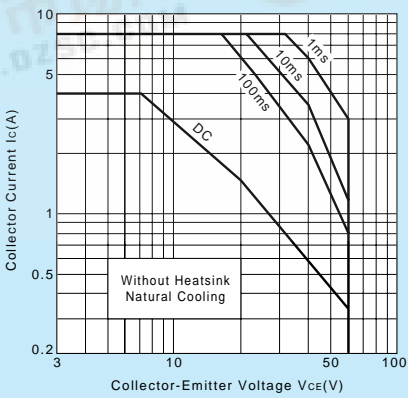
θ_{j-a}-t Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_C-T_a Derating

