

Silicon PNP Epitaxial Planar Transistor (Complement to type 2SC4886)

Application : Audio and General Purpose

Absolute maximum ratings (Ta=25°C)

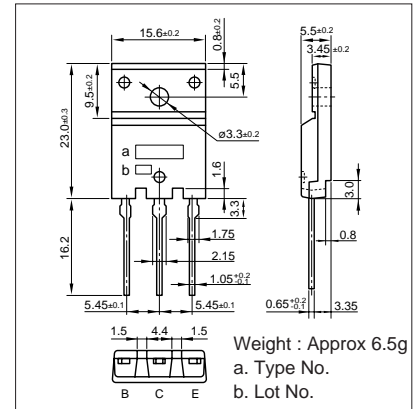
| Symbol | 2SA1860 | Unit |
|--------|-------------|------|
| VcBO | -150 | V |
| VcEO | -150 | V |
| VEBO | -5 | V |
| Ic | -14 | A |
| IB | -3 | A |
| Pc | 80(Tc=25°C) | W |
| Tj | 150 | °C |
| Tstg | -55 to +150 | °C |

Electrical Characteristics (Ta=25°C)

| Symbol | Conditions | 2SA1860 | Unit |
|----------|-------------------|---------|------|
| IcBO | VcB=-150V | -100max | μA |
| IEBO | VEB=-5V | -100max | μA |
| V(BR)CEO | Ic=-25mA | -150min | V |
| hFE | VCE=-4V, Ic=-5A | 50min* | |
| VCE(sat) | Ic=-5A, IB=-500mA | -2.0max | V |
| fr | VCE=-12V, IE=2A | 50typ | MHz |
| COB | VcB=-10V, f=1MHz | 400typ | pF |

*hFE Rank \bar{O} (50 to 100), P(70 to 140), Y(90 to 180)

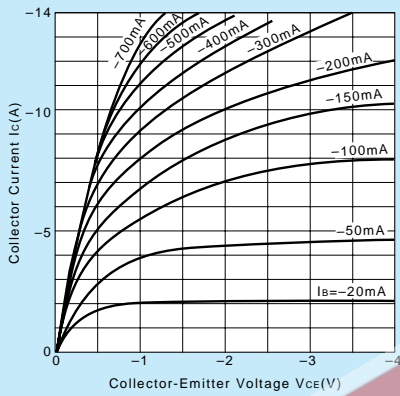
External Dimensions FM100(TO3PF)



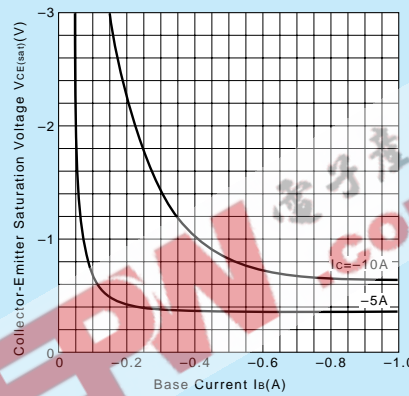
Typical Switching Characteristics (Common Emitter)

| Vcc (V) | RL (Ω) | Ic (A) | VBB1 (V) | VBB2 (V) | IB1 (mA) | IB2 (mA) | ton (μs) | tstg (μs) | tf (μs) |
|---------|--------|--------|----------|----------|----------|----------|----------|-----------|---------|
| -60 | 12 | -5 | -10 | 5 | -500 | 500 | 0.25typ | 0.85typ | 0.2typ |

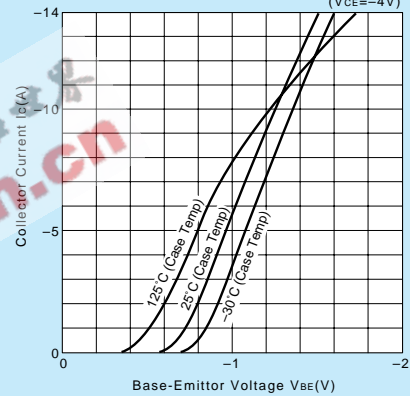
Ic-VCE Characteristics (Typical)



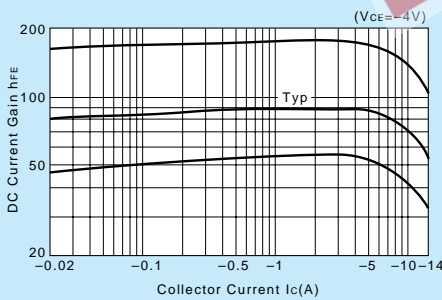
VCE(sat)-IB Characteristics (Typical)



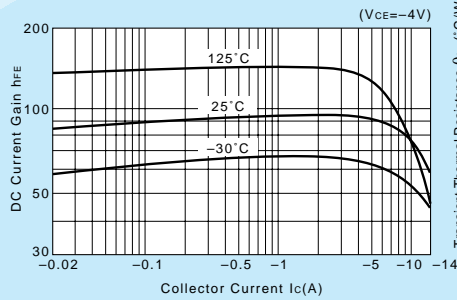
Ic-VBE Temperature Characteristics (Typical)



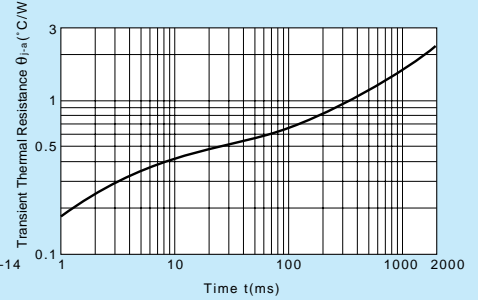
hFE-Ic Characteristics (Typical)



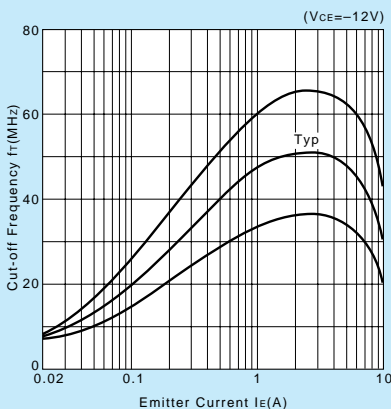
hFE-Ic Temperature Characteristics (Typical)



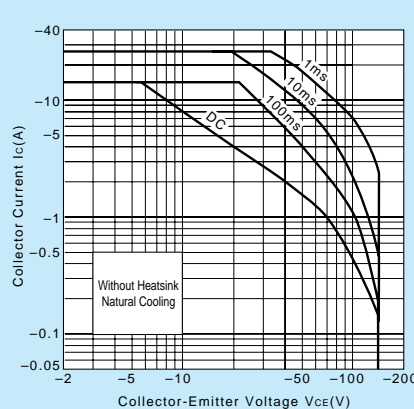
θj-a-t Characteristics



fr-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

