

# 2SA1494

Silicon PNP Epitaxial Planar Transistor (Complement to type 2SC3858)

Application : Audio and General Purpose

## Absolute maximum ratings (Ta=25°C)

| Symbol | 2SA1494      | Unit |
|--------|--------------|------|
| VCBO   | -200         | V    |
| VCEO   | -200         | V    |
| VEBO   | -6           | V    |
| IC     | -17          | A    |
| IB     | -5           | A    |
| PC     | 200(Tc=25°C) | W    |
| Tj     | 150          | °C   |
| Tstg   | -55 to +150  | °C   |

## Electrical Characteristics (Ta=25°C)

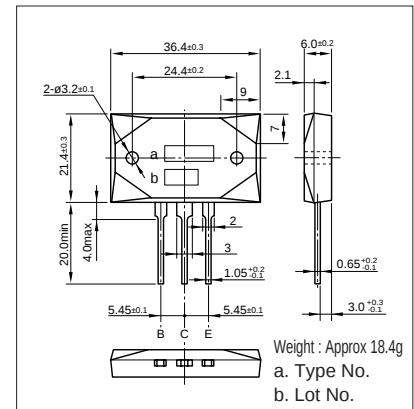
| Symbol   | Conditions       | 2SA1494 | Unit |
|----------|------------------|---------|------|
| ICBO     | VCB=-200V        | -100max | μA   |
| IEBO     | VEB=-6V          | -100max | μA   |
| V(BR)CEO | IC=-50mA         | -200min | V    |
| hFE      | VCE=-4V, IC=-8A  | 50min*  |      |
| VCE(sat) | IC=-10A, IB=-1A  | -2.5max | V    |
| fr       | VCE=-12V, IE=1A  | 20typ   | MHz  |
| COB      | VCB=-10V, f=1MHz | 500typ  | pF   |

\*hFE Rank Y(50 to 100), P(70 to 140), G(90 to 180)

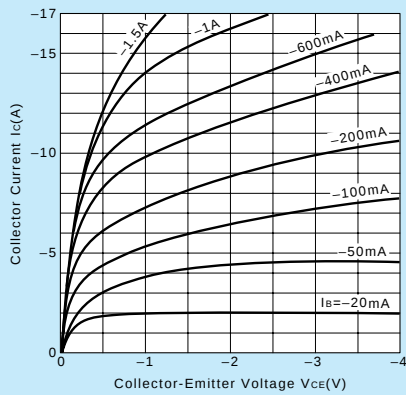
## Typical Switching Characteristics (Common Emitter)

| VCC (V) | RL (Ω) | IC (A) | VBB1 (V) | VBB2 (V) | IB1 (A) | IB2 (A) | ton (μs) | tstg (μs) | tf (μs) |
|---------|--------|--------|----------|----------|---------|---------|----------|-----------|---------|
| -40     | 4      | -10    | -10      | 5        | -1      | 1       | 0.6typ   | 0.9typ    | 0.2typ  |

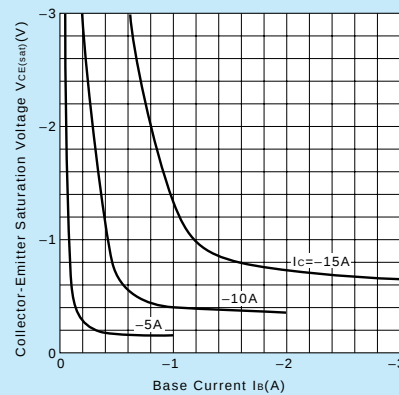
## External Dimensions MT-200



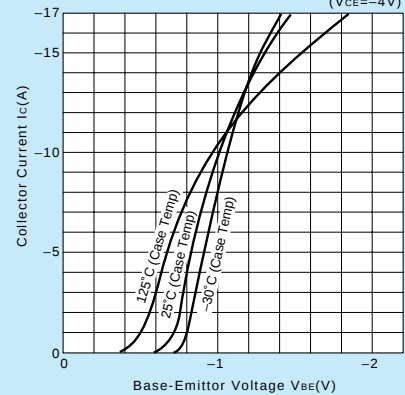
IC-VCE Characteristics (Typical)



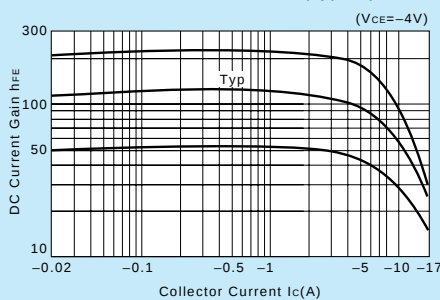
VCE(sat)-IB Characteristics (Typical)



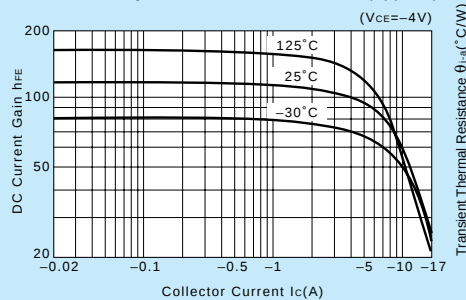
IC-VBE Temperature Characteristics (Typical)



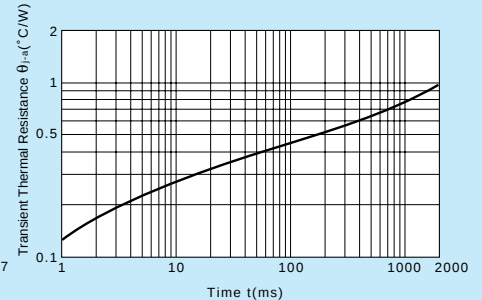
hFE-IC Characteristics (Typical)



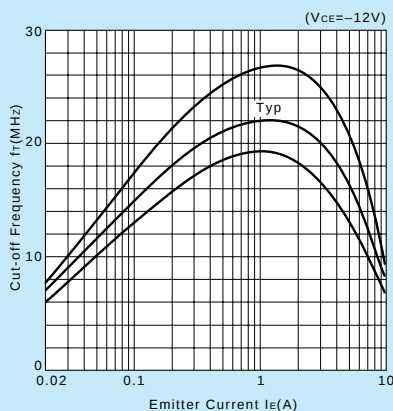
hFE-IC Temperature Characteristics (Typical)



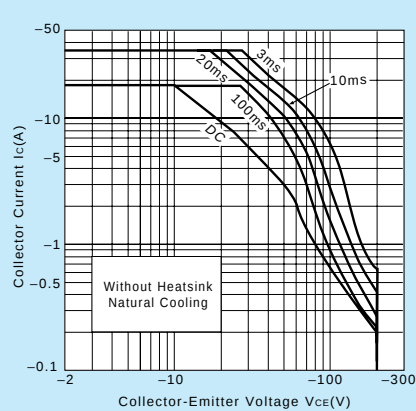
θj-a-t Characteristics



fT-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



PC-Ta Derating

