

isc Silicon PNP Power Transistor

2SA1837

DESCRIPTION

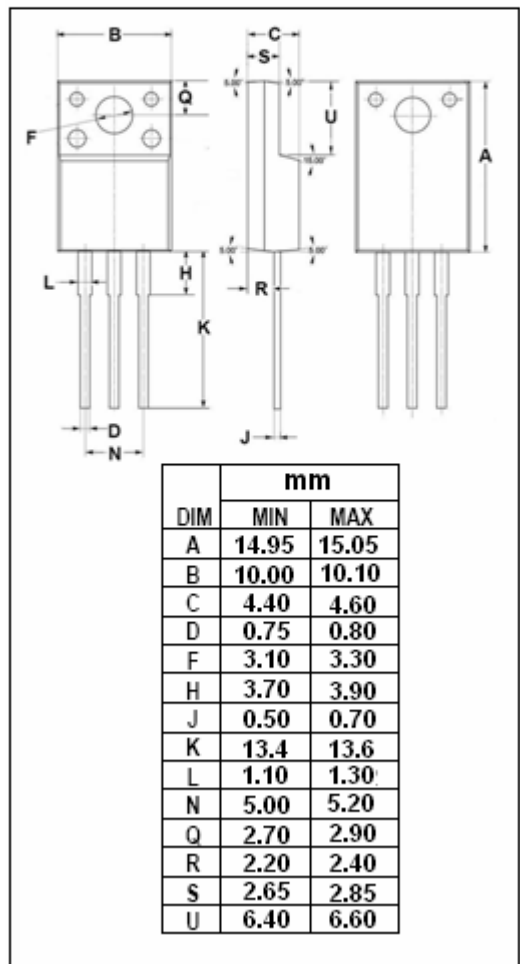
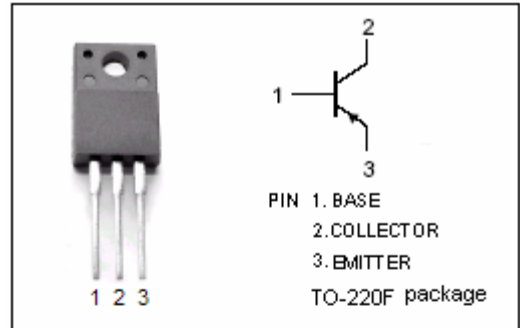
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -230V(\text{Min})$
- High Current-Gain Bandwidth Product
- Complement to Type 2SC4793

APPLICATIONS

- Power amplifier applications.
- Driver stage amplifier applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---------------------------------------------------------|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -230 | V |
| V_{CEO} | Collector-Emitter Voltage | -230 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current-Continuous | -1 | A |
| I_B | Base Current-Continuous | -0.1 | A |
| P_C | Collector Power Dissipation @ $T_a=25^\circ\text{C}$ | 2 | W |
| | Collector Power Dissipation @ $T_c=25^\circ\text{C}$ | 20 | |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ\text{C}$ |



isc Silicon PNP Power Transistor**2SA1837****ELECTRICAL CHARACTERISTICS****T_j=25°C unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|-----------------------------------------------------|------|------|------|------|
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage | I _C = -10mA ; I _B = 0 | -230 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = -500mA; I _B = -50mA | | | -1.5 | V |
| V _{BE(on)} | Base-Emitter On Voltage | I _C = -500mA ; V _{CE} = -5V | | | -1.0 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = -230V ; I _E =0 | | | -1.0 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = -5V; I _C =0 | | | -1.0 | μ A |
| h _{FE} | DC Current Gain | I _C = -100mA; V _{CE} = -5V | 100 | | 320 | |
| C _{OB} | Output Capacitance | I _E = 0; V _{CB} = -10V; f= 1MHz | | 30 | | pF |
| f _T | Current-Gain—Bandwidth Product | I _C = -100mA ; V _{CE} = -10V | | 70 | | MHz |