

isc Silicon PNP Power Transistor

2SA1040

DESCRIPTION

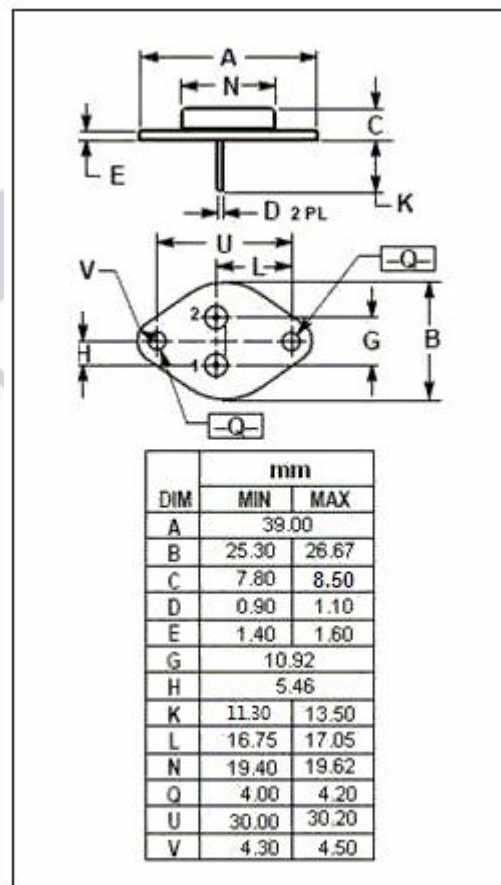
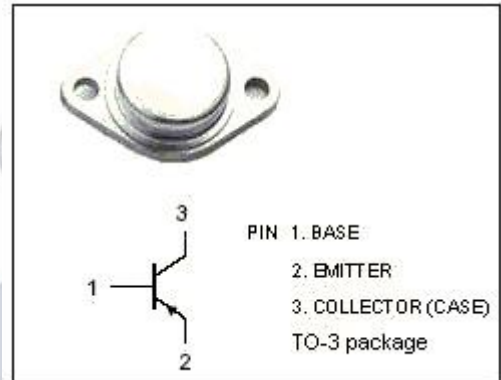
- High Current Capability
- Good Linearity of h_{FE}
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(\text{Min.})$
- Complement to Type 2SC2430

APPLICATIONS

- Designed for power switching , high frequency power amplifier, switching regulator and DC/DC converters.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -120 | V |
| V_{CEO} | Collector-Emitter Voltage | -120 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_c | Collector Current-Continuous | -10 | A |
| P_c | Collector Power Dissipation @ $T_c=25^\circ\text{C}$ | 100 | W |
| T_j | Junction Temperature | 175 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature | -55~175 | $^\circ\text{C}$ |



isc Silicon PNP Power Transistor**2SA1040****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 = -30mA; I _B = 0 | -120 | | | V |
| V _{(BR)CBO} | Collector-Base Breakdown Voltage | I _C = -1mA; I _E = 0 | -120 | | | V |
| V _{(BR)EBO} | Emitter-Base Breakdown Voltage | I _E = -1mA; I _C = 0 | -5 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = -5A; I _B = -0.5A | | | -1.2 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = -5A; I _B = -0.5A | | | -1.8 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = -120V; I _E = 0 | | | -50 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = -5V; I _C = 0 | | | -50 | μ A |
| h _{FE} | DC Current Gain | I _C = -1A; V _{CE} = -5V | 35 | | 200 | |
| C _{OB} | Output Capacitance | I _E = 0; V _{CB} = -10V; f= 1.0MHz | | 400 | | pF |
| f _T | Current-Gain—Bandwidth Product | I _C = -1A; V _{CE} = -10V | | 60 | | MHz |