

isc Silicon NPN Power Transistor

2SC4327

DESCRIPTION

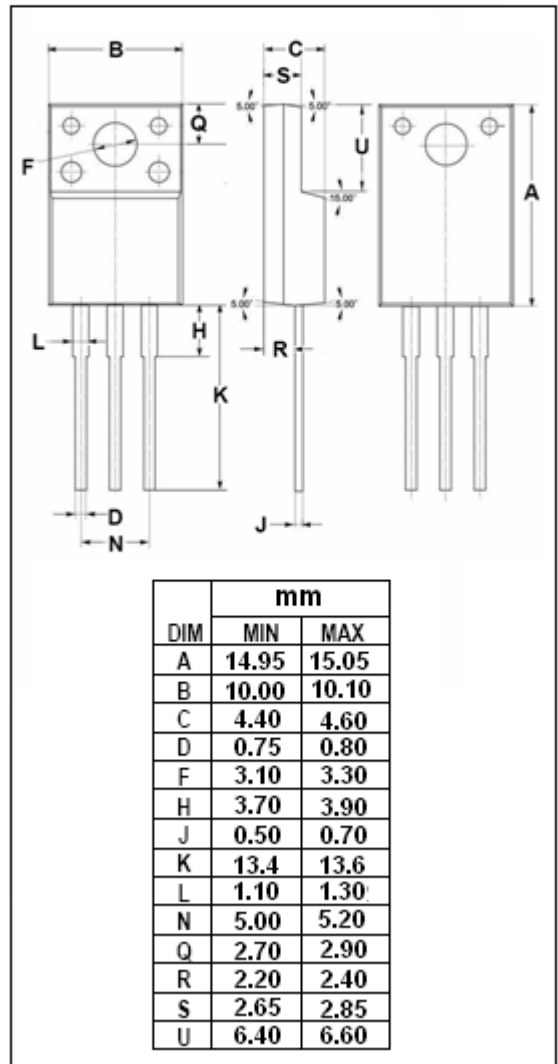
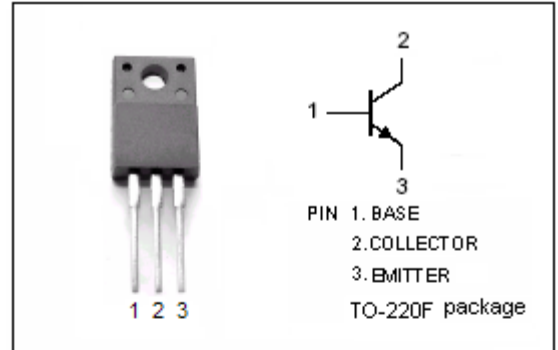
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 35V(\text{Min})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 0.5V(\text{Max}) @ (I_C = 5A, I_B = 0.3A)$
- Complement to Type 2SA1643

APPLICATIONS

- Designed for power switching applications.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 50 | V |
| V_{CEO} | Collector-Emitter Voltage | 35 | V |
| V_{EBO} | Emitter-Base Voltage | 7 | V |
| I_C | Collector Current-Continuous | 7 | A |
| P_C | Collector Power Dissipation @ $T_C=25^\circ\text{C}$ | 25 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ\text{C}$ |



isc Silicon NPN Power Transistor**2SC4327****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 = 25mA; I _B = 0 | 35 | | | V |
| V _{(BR)EBO} | Emitter-Base Breakdown Voltage | I _E = 1mA; I _C = 0 | 7 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 5A; I _B = 0.3A | | | 0.5 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = 5A; I _B = 0.3A | | | 1.2 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 50V; I _E = 0 | | | 10 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 7V; I _C = 0 | | | 10 | μ A |
| h _{FE} | DC Current Gain | I _C = 5A; V _{CE} = 2V | 50 | | | |
| f _T | Current-Gain—Bandwidth Product | I _E = -1A; V _{CE} = 12V | | 115 | | MHz |