

isc Silicon NPN Power Transistor
2SC5249
DESCRIPTION

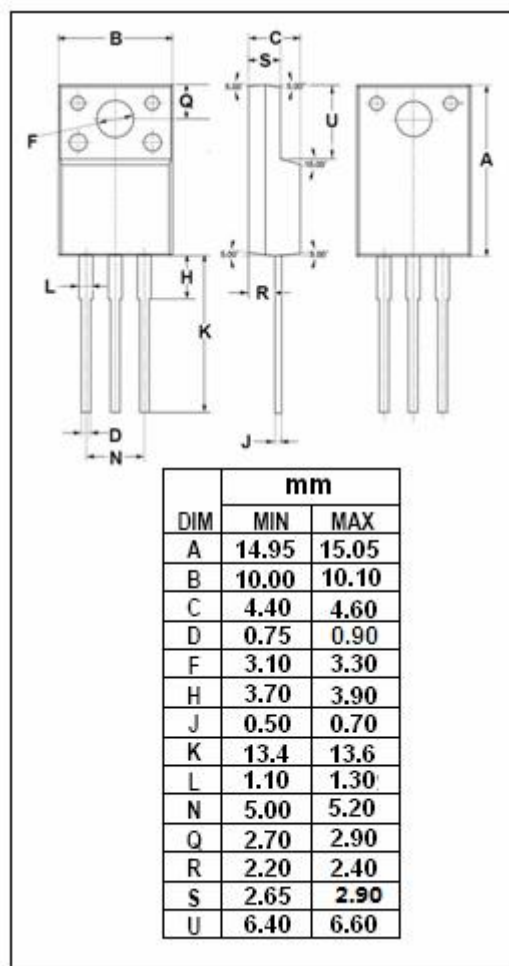
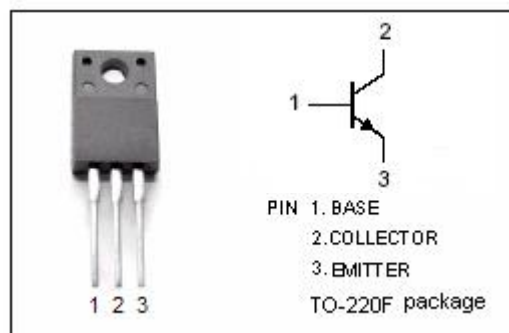
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 600V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for switching regulator and general purpose applications.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 600 | V |
| V_{CEO} | Collector-Emitter Voltage | 600 | V |
| V_{EBO} | Emitter-Base Voltage | 7 | V |
| I_C | Collector Current-Continuous | 3 | A |
| I_{CM} | Collector Current-Peak | 6 | A |
| I_B | Base Current-Continuous | 1.5 | A |
| P_C | Collector Power Dissipation @ $T_c = 25^\circ\text{C}$ | 35 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ\text{C}$ |



isc Silicon NPN Power Transistor**2SC5249****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 | 600 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 1A; I _B = 0.2A | | | 0.5 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = 1A; I _B = 0.2A | | | 1.2 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 600V ; I _E = 0 | | | 100 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 7V; I _C = 0 | | | 100 | μ A |
| h _{FE} | DC Current Gain | I _C = 1A ; V _{CE} = 4V | 20 | | 40 | |

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