

isc Silicon NPN Power Transistor
2SC3677
DESCRIPTION

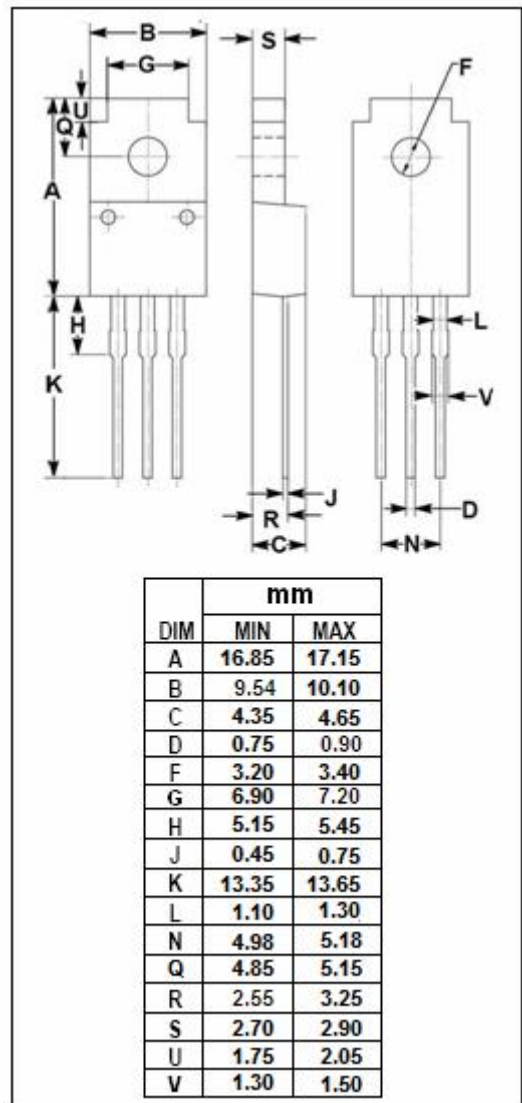
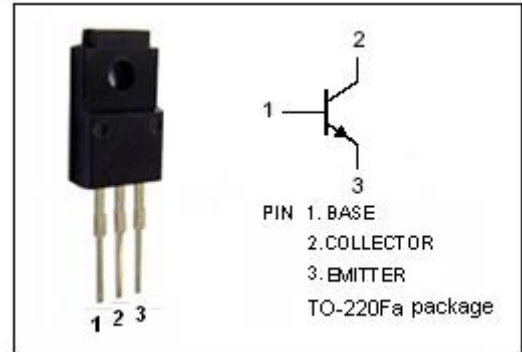
- Low Collector Saturation Voltage
- High breakdown voltage
- Good Linearity of h_{FE}
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High voltage amplifier
- High-voltage switching applications
- Dynamic focus applications

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 60 | V |
| V_{CEO} | Collector-Emitter Voltage | 60 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| I_C | Collector Current-Continuous | 3 | A |
| I_{CM} | Collector Current-Pulse | 6 | 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 Range | -55~150 | $^\circ\text{C}$ |



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ELECTRICAL CHARACTERISTICS

T_c=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 | 60 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C =2A; I _B =0.2A | | | 1.5 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C =2A; I _B = 0.2A | | | 2.0 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 60V; I _E = 0 | | | 10 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} =5V; I _C = 0 | | | 10 | μ A |
| h _{FE} | DC Current Gain | I _C =0.5A ; V _{CE} = 5V | 800 | | | |

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