

isc Silicon NPN Power Transistor

2SC5552

DESCRIPTION

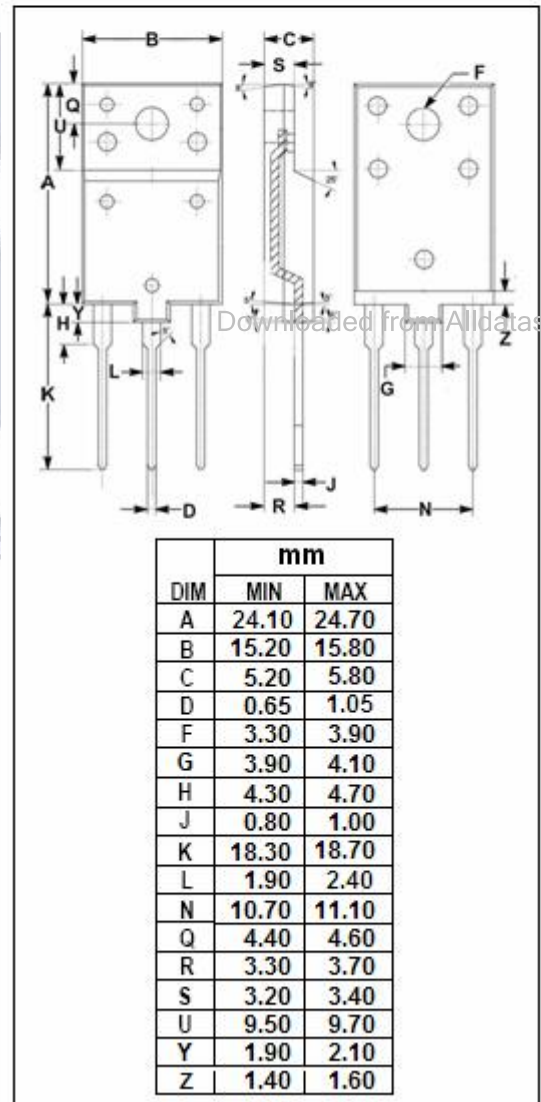
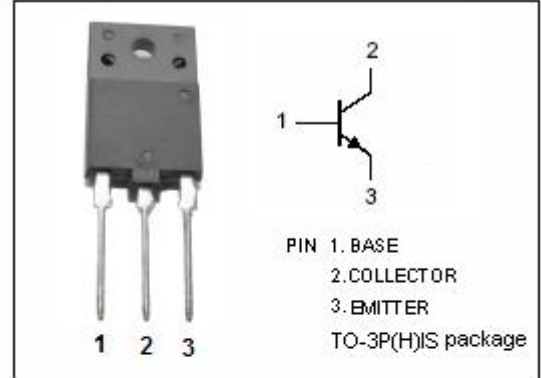
- High Breakdown Voltage
- High Switching Speed
- Low Saturation Voltage
- Wide area of safe operation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Character display horizontal deflection output

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|---------|------|
| V _{CBO} | Collector-Base Voltage | 1700 | V |
| V _{CEO} | Collector-Emitter Voltage | 600 | V |
| V _{EBO} | Emitter-Base Voltage | 7 | V |
| I _C | Collector Current- Continuous | 16 | A |
| I _{CM} | Collector Current- Continuous | 30 | A |
| I _B | Base Current- Continuous | 8 | A |
| P _C | Collector Power Dissipation @ T _C =25°C | 65 | W |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -55~150 | °C |



isc Silicon NPN Power Transistor**2SC5552****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|--------------------------------------|-----|------|-----|---------------|
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=8\text{A}; I_B=2\text{A}$ | | | 3.0 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C=8\text{A}; I_B=2\text{A}$ | | | 1.5 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB}=1500\text{V}; I_E=0$ | | | 1.0 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB}=7\text{V}; I_C=0$ | | | 50 | μA |
| h_{FE} | DC Current Gain | $I_C=8\text{A}; V_{CE}=5\text{V}$ | 6 | | 12 | |
| f_T | Current-Gain—Bandwidth Product | $I_E=0.1\text{A}; V_{CE}=10\text{V}$ | | 3 | | MHz |

Switching times

Downloaded from Alldatasheet.com

| | | | | | | |
|-----------|--------------|---|--|--|-----|---------------|
| t_{stg} | Storage Time | $I_C=8\text{A}, I_{B1}=2\text{A}; I_{B2}=-4\text{A};$ | | | 3.0 | μs |
| t_f | Fall Time | | | | 0.2 | μs |