

isc Silicon NPN Power Transistor

2SD1549

DESCRIPTION

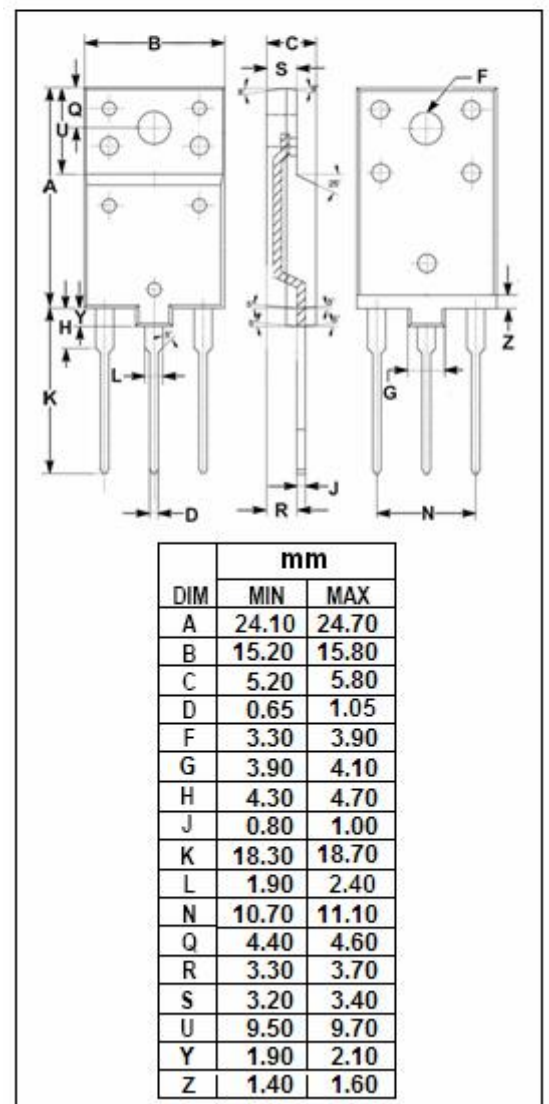
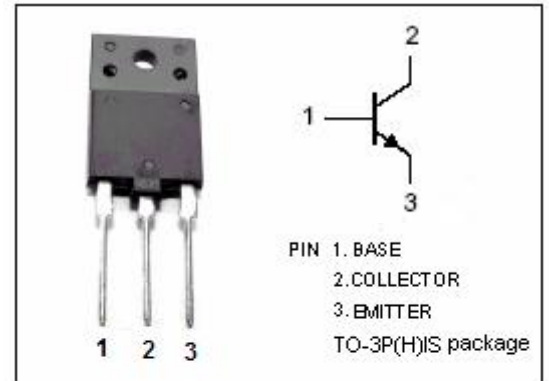
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 800V$ (Min)
- High Switching Speed
- Low Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in horizontal deflection circuits of color TV receivers.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|----------------------------------------------------|---------|-------------|
| V_{CBO} | Collector-Base Voltage | 1000 | V |
| V_{CEO} | Collector-Emitter Voltage | 800 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| I_C | Collector Current- Continuous | 5 | A |
| I_{CM} | Collector Current-Peak | 8 | A |
| I_B | Base Current- Continuous | 2.5 | A |
| P_C | Collector Power Dissipation @ $T_C=25^{\circ}C$ | 50 | W |
| T_J | Junction Temperature | 150 | $^{\circ}C$ |
| T_{stg} | Storage Temperature Range | -65~150 | $^{\circ}C$ |



isc Silicon NPN Power Transistor**2SD1549****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|--------------------------------------------------------------------------|-----|------|-----|------|
| V _{CEO(SUS)} | Collector-Emitter Sustaining Voltage | I _C = 10mA ; I _B = 0 | 800 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 4A; I _B = 0.8A | | | 5.0 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = 4A; I _B = 0.8A | | | 1.5 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 500V; I _E = 0 | | | 10 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 5.0V ; I _C = 0 | | | 1.0 | mA |
| h _{FE-1} | DC Current Gain | I _C = 1A ; V _{CE} = 5V | 8 | | 30 | |
| C _{OB} | Output Capacitance | I _E = 0; V _{CB} = 10V; f _{test} = 0.1MHz | | 165 | | pF |
| f _T | Current-Gain—Bandwidth Product | I _C = 0.1A; V _{CE} = 10V; f _{test} = 1.0MHz | | 3 | | MHz |
| t _f | Fall Time | I _{CP} = 4A, I _{B1(end)} = 0.8A | | | 1.0 | μ s |

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