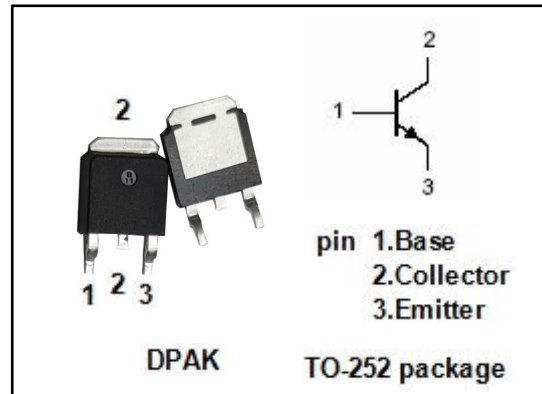


isc Silicon NPN Power Transistor
2SC3631-Z
DESCRIPTION

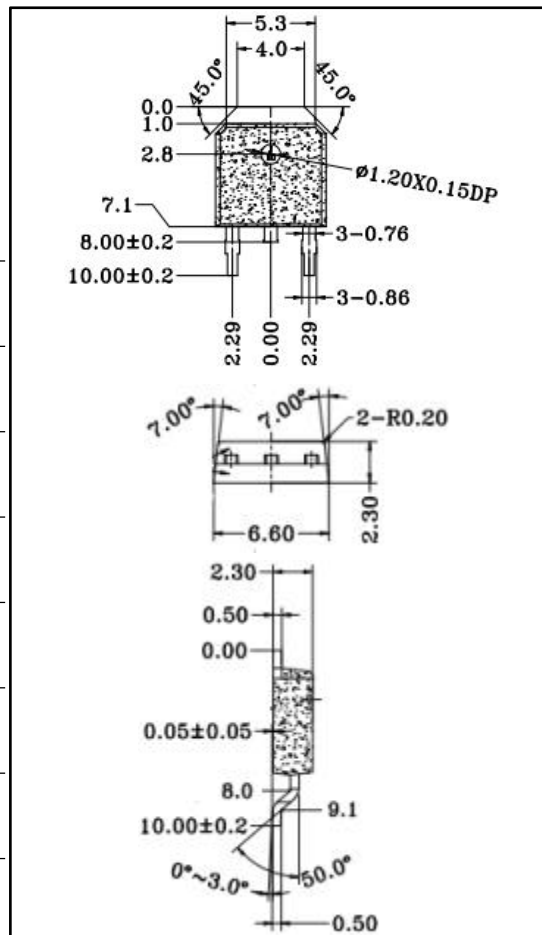
- With TO-252(DPAK) packaging
- Excellent linearity of h_{FE}
- Low collector-to-emitter saturation voltage
- Fast switching speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Relay drivers
- High-speed inverters
- Converters
- High current switching applications


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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 500 | V |
| V_{CEO} | Collector-Emitter Voltage | 400 | V |
| V_{EBO} | Emitter-Base Voltage | 7 | V |
| I_C | Collector Current-Continuous | 2 | A |
| P_C | Collector Power Dissipation @ $T_c=25^\circ\text{C}$ | 2 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ\text{C}$ |



isc Silicon NPN Power Transistor

2SC3631-Z

ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| BV _{CBO} | Collector-Base Breakdown Voltage | I _C =1mA; I _B =0 | 500 | | | V |
| BV _{CEO} | Collector-Emitter Breakdown Voltage | I _C =10mA; I _B =0 | 400 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 1.0A; I _B = 0.2A | | | 1.0 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = 1.0A; I _B = 0.2A | | | 1.5 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 500V; I _E = 0 | | | 10 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 7V; I _C =0 | | | 10 | μ A |
| h _{FE-1} | DC Current Gain | I _C = 100mA ; V _{CE} = 5V | 40 | | 120 | |
| h _{FE-2} | DC Current Gain | I _C = 1A ; V _{CE} = 5V | 6 | | | |

NOTICE:

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