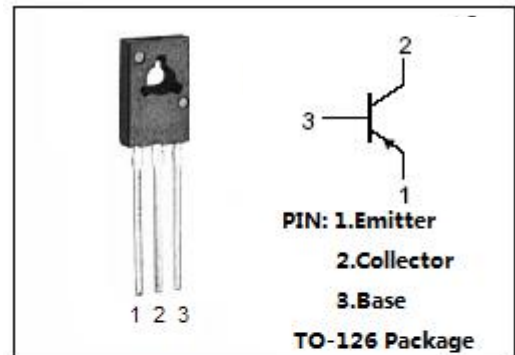


isc Silicon PNP Power Transistor
2SA1120
DESCRIPTION

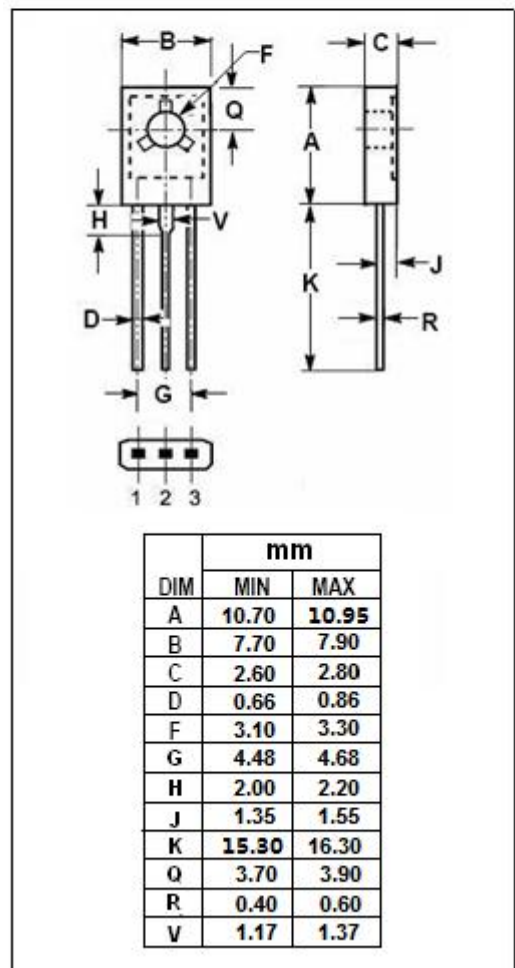
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -20V$ (Min)
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.0V$ (Max.) @ $I_C = 0.1A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Strobe flash applications
- Audio power amplifier applications


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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------|
| V_{CBO} | Collector-Base Voltage | -35 | V |
| V_{CEO} | Collector-Emitter Voltage | -20 | V |
| V_{EBO} | Emitter-Base Voltage | -8 | V |
| I_C | Collector Current-Continuous | -5 | A |
| I_{CM} | Collector Current-Peak | -8 | A |
| I_E | Emitter Current-Continuous | 5 | A |
| I_{EM} | Emitter Current-Peak | 8 | A |
| P_C | Collector Power Dissipation @ $T_a = 25^\circ C$ | 1.0 | W |
| | Collector Power Dissipation @ $T_C = 25^\circ C$ | 10 | |
| T_J | Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ C$ |



isc Silicon PNP Power Transistor
2SA1120
ELECTRICAL CHARACTERISTICS
 $T_c=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|---|-----|------|------|------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C = -10\text{mA}; I_B = 0$ | -20 | | | V |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E = -1\text{mA}; I_C = 0$ | -8 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -4\text{A}; I_B = -0.1\text{A}$ | | | -1.0 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $I_C = -4\text{A}; V_{CE} = -2\text{V}$ | | | -1.5 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB} = -35\text{V}; I_E = 0$ | | | -100 | nA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB} = -8\text{V}; I_C = 0$ | | | -100 | nA |
| h_{FE-1} | DC Current Gain | $I_C = -0.5\text{A}; V_{CE} = -2\text{V}$ | 100 | | 320 | |
| h_{FE-2} | DC Current Gain | $I_C = -4\text{A}; V_{CE} = -2\text{V}$ | 70 | | | |

◆ h_{FE-1} Classifications

| O | Y |
|---------|---------|
| 100-200 | 160-320 |

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