

isc Silicon PNP Power Transistors

2SA1220/A

DESCRIPTION

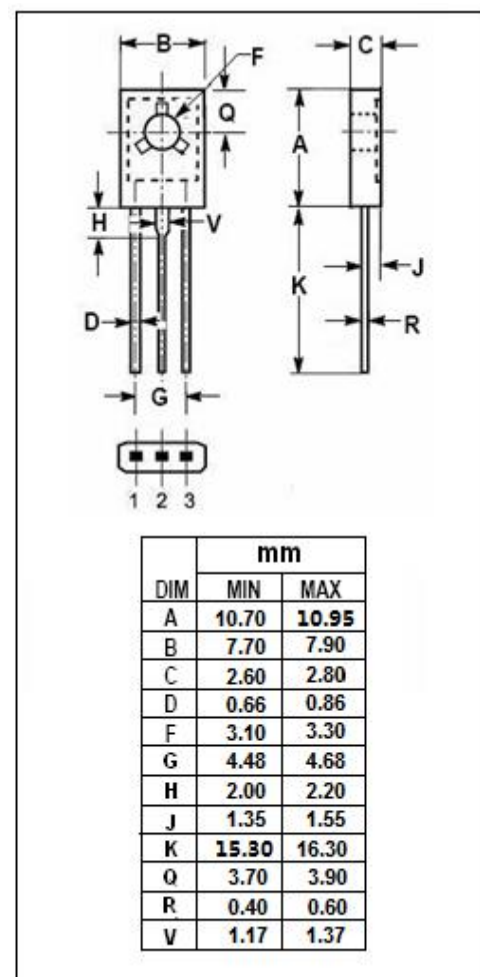
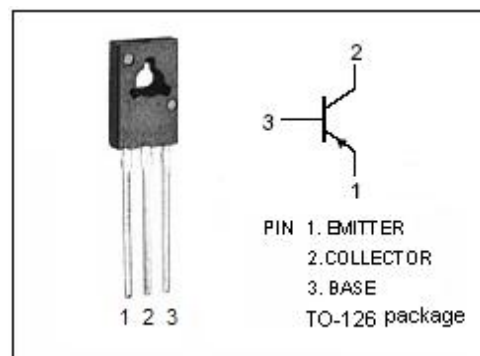
- Good Linearity of h_{FE}
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(\text{Min})$ -2SA1220
= $-160V(\text{Min})$ -2SA1220A
- Complement to Type 2SC2690/A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Audio frequency power amplifier
- High frequency power amplifier

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

| SYMBOL | PARAMETER | | VALUE | UNIT |
|-----------|---|----------|---------|--------------------|
| V_{CBO} | Collector-Base Voltage | 2SA1220 | -120 | V |
| | | 2SA1220A | -160 | |
| V_{CEO} | Collector-Emitter Voltage | 2SA1220 | -120 | V |
| | | 2SA1220A | -160 | |
| V_{EBO} | Emitter-Base Voltage | | -5 | V |
| I_C | Collector Current-Continuous | | -1.2 | A |
| I_{CM} | Collector Current-Peak | | -2.5 | A |
| I_B | Base Current-Continuous | | -0.3 | A |
| P_C | Collector Power Dissipation @ $T_a=25^{\circ}\text{C}$ | | 1.2 | W |
| | Total Power Dissipation @ $T_C=25^{\circ}\text{C}$ | | 20 | |
| T_J | Junction Temperature | | 150 | $^{\circ}\text{C}$ |
| T_{stg} | Storage Temperature Range | | -55~150 | $^{\circ}\text{C}$ |



isc Silicon PNP Power Transistors**2SA1220/A****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|------|------|
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = -1A; I _B = -0.2A | | | -0.7 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = -1A; I _B = -0.2A | | | -1.3 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = -120V; I _E = 0 | | | -1.0 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = -3V; I _C =0 | | | -1.0 | μ A |
| h _{FE-1} | DC Current Gain | I _C = -5mA ; V _{CE} = -5V | 35 | | | |
| h _{FE-2} | DC Current Gain | I _C = -0.3A ; V _{CE} = -5V | 60 | | 320 | |
| f _T | Current-Gain—Bandwidth Product | I _C = -0.2A ; V _{CE} = -5V | | 175 | | MHz |
| C _{OB} | Output Capacitance | I _E = 0; V _{CB} = -10V; f _{test} = 1.0MHz | | 26 | | pF |

◆ h_{FE-2} Classifications

| R | Q | P |
|--------|---------|---------|
| 60-120 | 100-200 | 160-320 |

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