

isc Silicon NPN Power Transistor

2SD726

DESCRIPTION

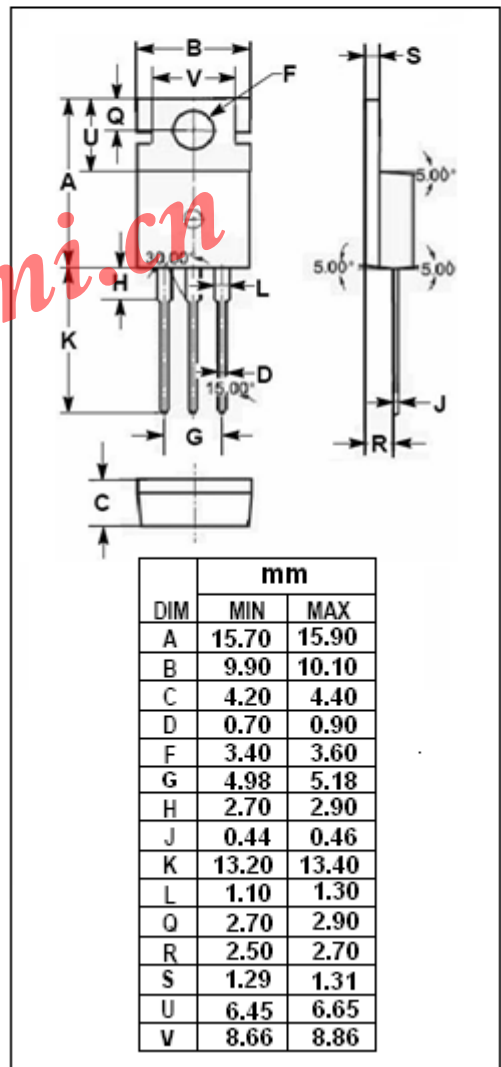
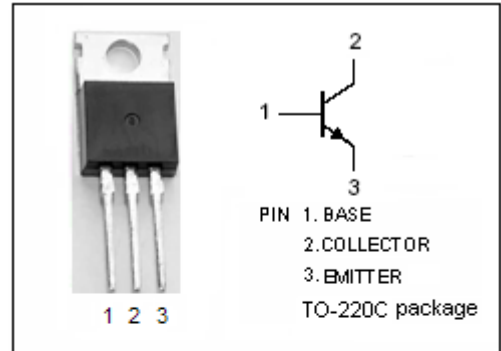
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 80V(\text{Min})$
- High Power Dissipation
- Complement to Type 2SB690

APPLICATIONS

- Designed for low frequency power amplifier applications.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 100 | V |
| V_{CEO} | Collector-Emitter Voltage | 80 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| I_C | Collector Current-Continuous | 4 | A |
| I_{CM} | Collector Current-Peak | 8 | A |
| P_C | Total Power Dissipation @ $T_C=25^\circ\text{C}$ | 40 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -45~150 | $^\circ\text{C}$ |



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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 | $I_C=50\text{mA}; R_{BE}=\infty$ | 80 | | | V |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E=10\mu\text{A}; I_C=0$ | 5 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=2\text{A}; I_B=0.2\text{A}$ | | | 2.0 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $I_C=1\text{A}; V_{CE}=5\text{V}$ | | | 1.5 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB}=80\text{V}; I_E=0$ | | | 0.1 | mA |
| h_{FE-1} | DC Current Gain | $I_C=1\text{A}; V_{CE}=5\text{V}$ | 60 | | 200 | |
| h_{FE-2} | DC Current Gain | $I_C=0.1\text{A}; V_{CE}=5\text{V}$ | 35 | | | |
| C_{OB} | Collector Output Capacitance | $I_E=0; V_{CB}=20\text{V}; f=1\text{MHz}$ | | 40 | | pF |
| f_T | Current-Gain—Bandwidth Product | $I_C=0.5\text{A}; V_{CE}=5\text{V}$ | | 10 | | MHz |

◆ h_{FE-1} Classifications

| B | C |
|--------|---------|
| 60-120 | 100-200 |