

isc Silicon NPN Darlington Power Transistor

2SD692

DESCRIPTION

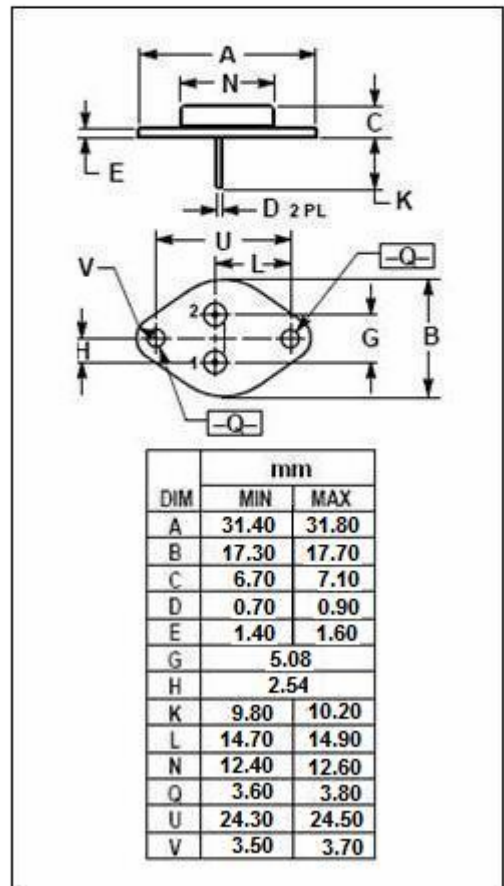
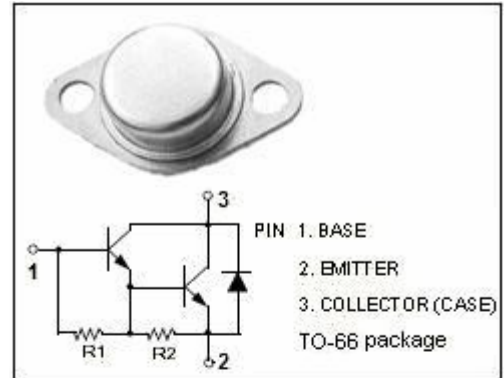
- Built-in Base-Emitter Shunt Resistors
- High DC current gain-
 $h_{FE} = 1000$ (Min) @ $I_C = 1$ Adc
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 80V$ (Min)
- Wide Area of Safe Operation

APPLICATIONS

- Designed for high power amplifier applications.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------|
| V_{CBO} | Collector-Base Voltage | 100 | V |
| V_{CER} | Collector-Emitter Voltage | 100 | V |
| V_{CEO} | Collector-Emitter Voltage | 80 | V |
| V_{EBO} | Emitter-Base Voltage | 6 | V |
| I_C | Collector Current -Continuous | 6 | A |
| I_B | Base Current -Continuous | 3 | A |
| P_C | Collector Power Dissipation@ $T_C=25^\circ C$ | 50 | W |
| T_j | Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature | -65~150 | $^\circ C$ |



isc Silicon NPN Darlington Power Transistor**2SD692****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------|--------------------------------------|---|------|-------|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C=50\text{mA}$; $I_B=0$ | 80 | | V |
| V_{CER} | Collector-Emitter Breakdown Voltage | $I_C=50\text{mA}$; $R_{BE}=1\text{ k}\Omega$ | 100 | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=3\text{A}$; $I_B=60\text{mA}$ | | 1.7 | V |
| I_{CBO} | Collector Cutoff current | $V_{CB}=100\text{V}$; $I_E=0$ | | 10 | μA |
| I_{EBO} | Emitter Cut-off current | $V_{EB}=6\text{V}$; $I_C=0$ | | 10 | mA |
| h_{FE} | DC Current Gain | $I_C=1\text{A}$; $V_{CE}=4\text{V}$ | 1000 | 10000 | |

◆ **h_{FE} Classifications**

| Q | P | O |
|-----------|-----------|------------|
| 1000-2500 | 2000-5000 | 4000-10000 |