

isc Silicon NPN Darlington Power Transistor**2SD692****DESCRIPTION**

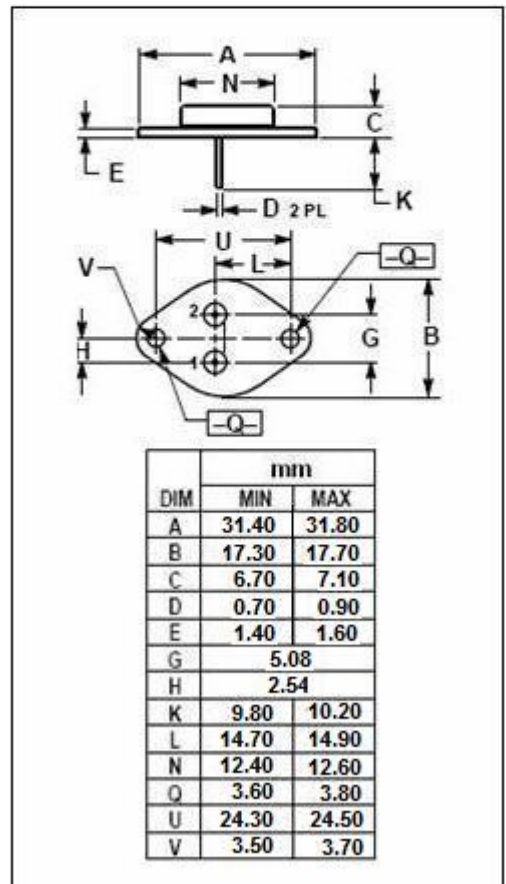
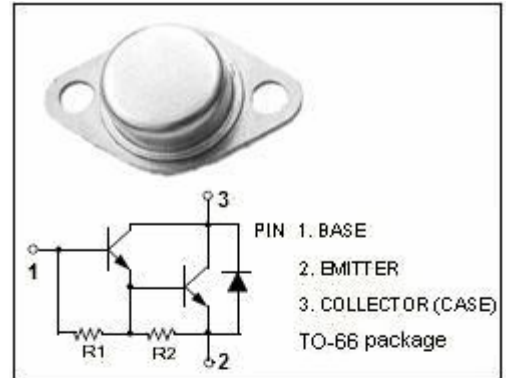
- Built-in Base-Emitter Shunt Resistors
- High DC current gain-
 $h_{FE} = 1000 \text{ (Min) @ } I_C = 1 \text{ A dc}$
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 80 \text{ V (Min)}$
- Wide Area of Safe Operation

APPLICATIONS

- Designed for high power amplifier applications.

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

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@ $T_C = 25^\circ\text{C}$	50	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$



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