

DESCRIPTION

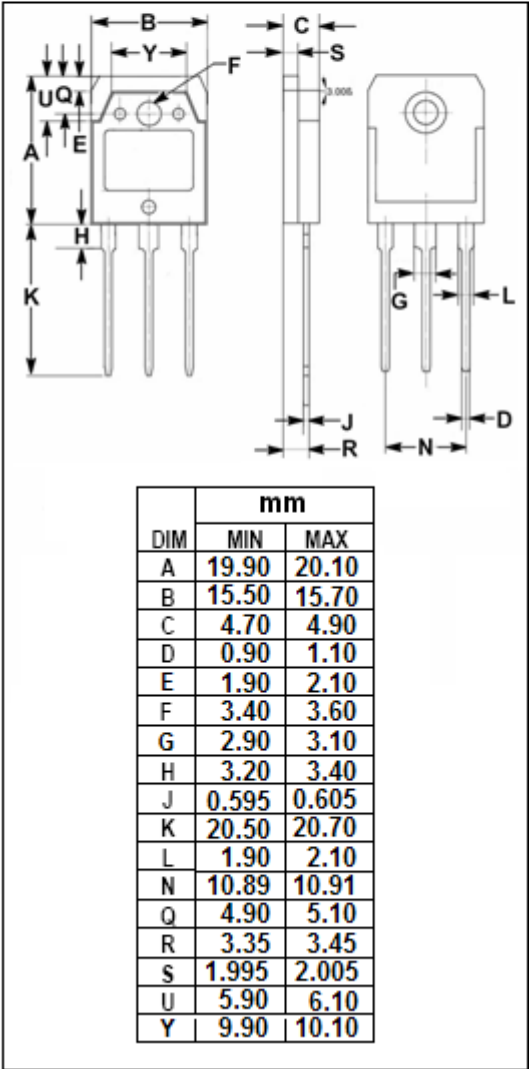
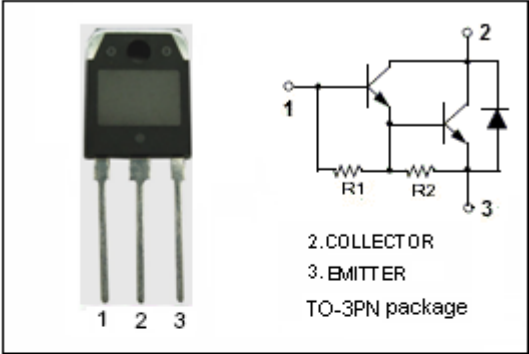
- High DC Current Gain
: $h_{FE} = 700(\text{Min.}) @ I_C = 1\text{A}, V_{CE} = 4\text{V}$
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 80\text{V}(\text{Min})$
- Wide Area of Safe Operation

APPLICATIONS

- Designed for high power amplifier applications.

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

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 @ $T_C = 25^\circ\text{C}$	60	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Darlington Power Transistor

2SD1044

ELECTRICAL CHARACTERISTICS**T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CER}	Collector-Emitter Breakdown Voltage	I _C = 50mA, R _{BE} = 1k Ω	100			V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 50mA, I _B = 0	80			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A, I _B = 30mA			1.7	V
I _{CBO}	Collector Cutoff current	V _{CB} = 100V, I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			10	mA
h _{FE}	DC Current Gain	I _C = 1A; V _{CE} = 4V	700		10000	

◆ h_{FE} classifications

Q	P	O
700-2500	2000-5000	4000-10000