

Silicon NPN Darlington Power Transistor

2SD1597

DESCRIPTION

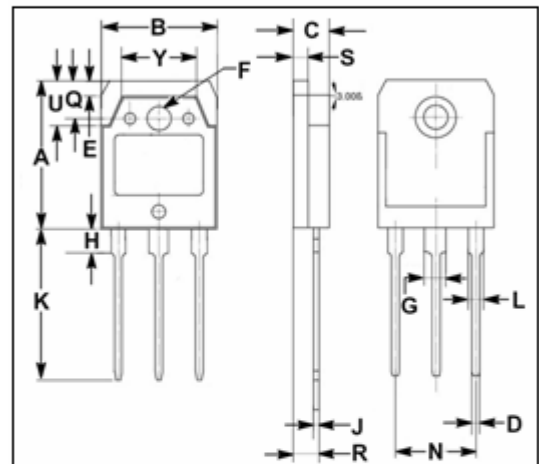
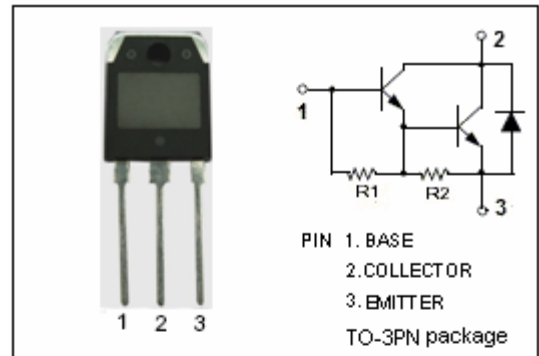
- Collector Current $-I_C = 30A$
- High DC Current Gain-
: $h_{FE} = 1000(\text{Min}) @ I_C = 15A$
- Low Collector Saturation Voltage

APPLICATIONS

- Designed for audio frequency power amplifier and low speed high current switching industrial use.

ABSOLUTE MAXIMUM RATINGS($T_a=25$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	30	A
I_B	Base Current-Continuous	1.5	A
P_C	Collector Power Dissipation @ $T_C=25$	80	W
T_J	Junction Temperature	150	
T_{stg}	Storage Temperature Range	-55~150	



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

Silicon NPN Darlington Power Transistor**2SD1597****ELECTRICAL CHARACTERISTICS** $T_C=25$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C= 25mA ; I_B=0$	120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 5mA ; I_C=0$	7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 30A; I_B= 0.1A$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 30A; I_B= 0.1A$			2.5	V
I_{CEO}	Collector Cutoff Current	$V_{CE}= 60V; I_B= 0$			1.0	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}= 120V; I_E= 0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 7V; I_C=0$			5	mA
h_{FE}	DC Current Gain	$I_C= 15A ; V_{CE}= 2V$	1000			