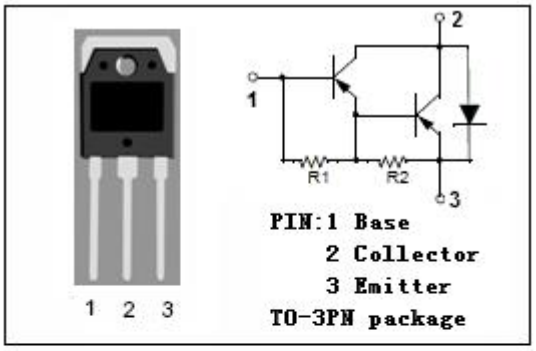
isc Silicon PNP Darlington Power Transistor 2SB1031

DESCRIPTION

- High DC Current Gain-
  : h_{FE} = 1000(Min)@ I_C= -8A
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = -100V(Min)
- Complement to Type 2SD1435
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

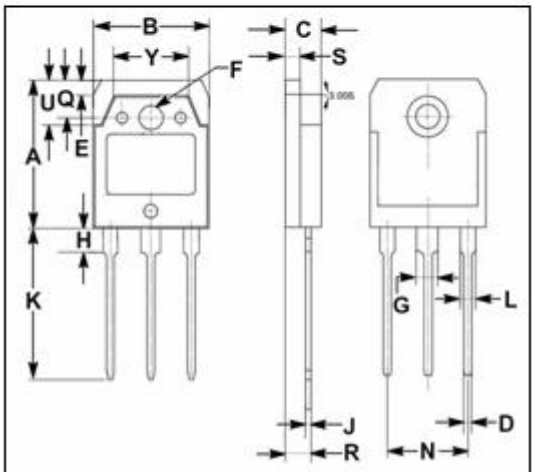


APPLICATIONS

- Designed for low frequency power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-15	A
I_{CM}	Collector Current-Peak	-20	A
I_B	Base Current- Continuous	-3	A
P_C	Collector Power Dissipation @T_C=25℃	100	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	19.60	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	3.20
H	3.20	3.40
J	0.595	0.605
K	20.00	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.10
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -30mA, R_{BE}= ∞	-100			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -1mA, R_{BE}= ∞	-100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -5mA , I_C= 0	-7			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -8A ,I_B= -16mA			-2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -15A ,I_B= -150mA			-3.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= -8A ,I_B= -16mA			-2.5	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= -15A ,I_B= -150mA			-3.5	V
I_{CBO}	Collector Cutoff current	V_{CB}= -100V, I_E= 0			-0.1	mA
I_{CEO}	Collector Cutoff current	V_{CE}= -80V, R_{BE}= ∞			-1.0	mA
h_{FE}	DC Current Gain	I_C= -8A ; V_{CE}= -3V	1000		20000	