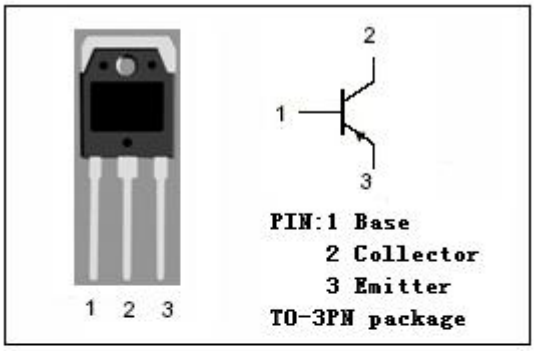
isc Silicon PNP Power Transistor — 2SB1230

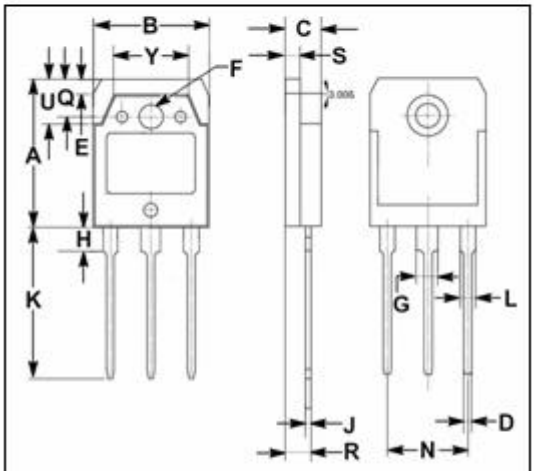
DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -100V(Min)
- High Current Capability
- Wide Area of Safe Operation
- Complement to Type 2SD1840
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for motor drivers, converters and other general High-current switching applications.



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-110	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-15	A
I_{CP}	Collector Current-Pulse	-25	A
I_B	Base Current-Continuous	-5	A
P_C	Collector Power Dissipation @ T_a=25℃	3	W
	Collector Power Dissipation @ T_C=25℃	100	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -5mA ; R_{BE}=∞	-100			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= -1mA; I_E= 0	-110			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -1mA; I_C= 0	-6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -6A; I_B= -0.6A			-0.8	V
$V_{BE(sat)}$	Base -Emitter Saturation Voltage	I_C= -6A; I_B= -0.6A			-1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -100V; I_E= 0			-100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-100	μA
h_{FE-1}	DC Current Gain	I_C= -1.5A; V_{CE}= -2V	50		140	
h_{FE-2}	DC Current Gain	I_C= -6A; V_{CE}= -2V	20			

◆ **h_{FE-1} Classifications**

P	Q
50-100	70-140

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