New Jersey Semi-Conductor Products, Inc.

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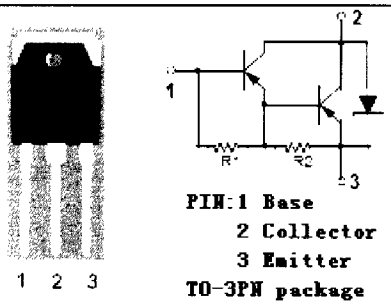
Silicon PNP Darlington Power Transistor — 2SB887

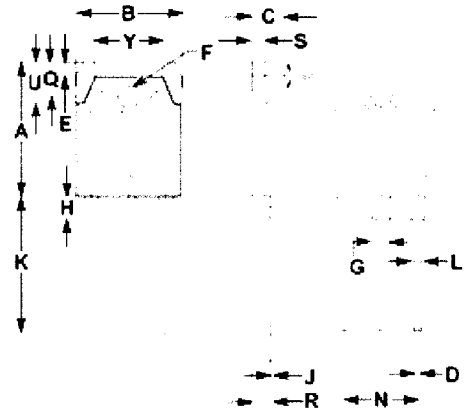
DESCRIPTION

- High DC Current Gain-
  : h_{FE} = 1500(Min)@ I_C= -5A
- Wide Area of Safe Operation
- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$ = -1.5V(Max)@ I_C= -5A
- Complement to Type 2SD1197



APPLICATIONS

- Designed for motor drivers, printer hammer drivers, relay drivers, voltage regulators 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 (Ta=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	-10	A
I_{CM}	Collector Current-Peak	-15	A
P_C	Collector Power Dissipation T_C=25℃	70	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -50mA, R_{BE}= ∞	-100			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= -5mA, I_E= 0	-110			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5A, I_B= -10mA			-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -5A, I_B= -10mA			-2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -80V, I_E= 0			-100	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-3	mA
h_{FE}	DC Current Gain	I_C= -5A; V_{CE}= -3V	1500			
f_T	Current-Gain—Bandwidth Product	I_C= -5A; V_{CE}= -5V		20		MHz