New Jersey Semi-Conductor Products, Inc.

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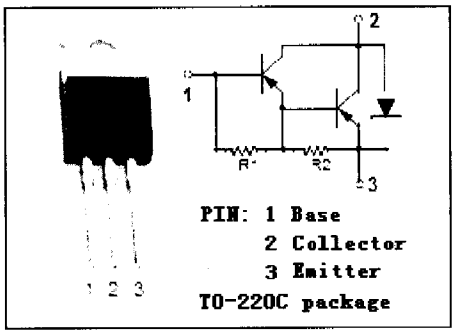
Silicon PNP Darlington Power Transistor

2SB727

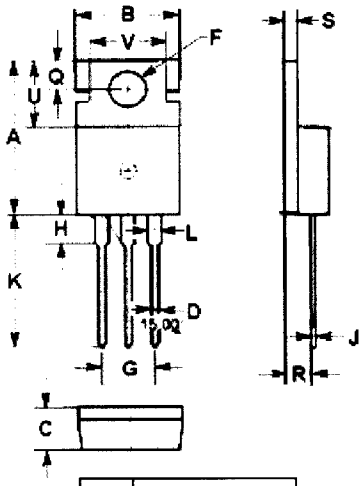


DESCRIPTION

- High DC Current Gain-
  : h_{FE} = 1000(Min)@ I_C= -3A
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$ = -120V(Min)
- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$ = -1.5V(Max)@ I_C= -3A
- Complement to Type 2SD768

APPLICATIONS

- Medium speed and power switching applications.



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.10	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS (Ta=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	-6	A
I_{CM}	Collector Current-Peak	-10	A
P_C	Collector Power Dissipation T_C=25℃	40	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= -25mA, R_{BE}= ∞	-120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -50mA, I_C= 0	-7			V
$V_{CE(sat)-1}$★	Collector-Emitter Saturation Voltage	I_C= -3A, I_B= -6mA			-1.5	V
$V_{CE(sat)-2}$★	Collector-Emitter Saturation Voltage	I_C= -6A, I_B= -60mA			-3.0	V
$V_{BE(sat)-1}$★	Base-Emitter Saturation Voltage	I_C= -3A, I_B= -6mA			-2.0	V
$V_{BE(sat)-2}$★	Base-Emitter Saturation Voltage	I_C= -6A, I_B= -60mA			-3.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -120V, I_E= 0			-100	μ A
I_{CEO}	Collector Cutoff Current	V_{CE}= -100V; R_{BE}= ∞			-10	μ A
h_{FE}★	DC Current Gain	I_C= -3A; V_{CE}= -3V	1000		20000	

★:Pulse Test