New Jersey Semi-Conductor Products, Inc.

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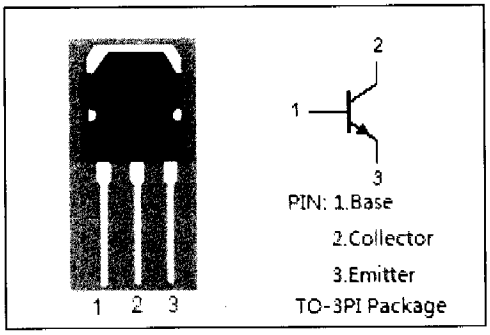
Silicon PNP Power Transistor

2SB688



DESCRIPTION

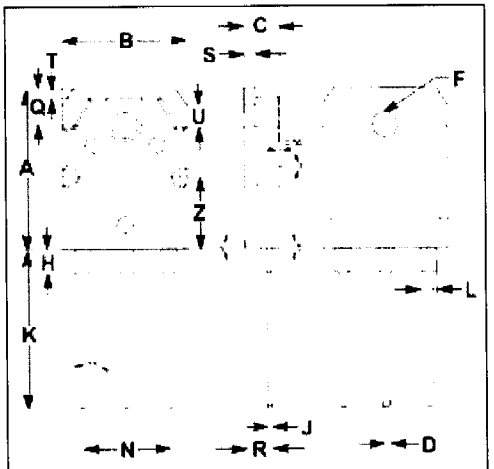
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -120V(Min)
- Good Linearity of h_{FE}
- Complement to Type 2SD718

APPLICATIONS

- Audio frequency power amplifier applications
- Recommend for 45-50W audio frequency amplifier output stage applications

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	-5	V
I_C	Collector Current-Continuous	-8	A
I_B	Base Current-Continuous	-0.8	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	19.60	20.10
B	15.30	15.70
C	4.00	4.60
D	0.90	1.10
F	3.20	3.40
H	2.90	3.10
J	0.50	0.70
K	19.90	21.30
L	1.20	2.20
N	10.80	11.00
Q	4.40	4.60
R	3.30	3.35
S	1.40	1.60
T	1.00	1.20
U	2.10	2.30
Z	7.90	9.10

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 ; I_B= 0	-120			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5.0A; I_B= -0.5A			-2.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -5A ; V_{CE}= -5V			-1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -120V ; I_E= 0			-10	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-10	μ A
h_{FE}	DC Current Gain	I_C= -1A ; V_{CE}= -5V	55		160	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V; f_{test}= 1.0MHz		280		pF
f_T	Current-Gain—Bandwidth Product	I_C=-1A ; V_{CE}= -5V		10		MHz

◆ **h_{FE} Classifications**

R	O
55-110	80-160