

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
 SPRINGFIELD, NEW JERSEY 07081
 U.S.A.

TELEPHONE: (973) 376-2922
 (212) 227-6005
 FAX: (973) 376-8960

Silicon PNP Power Transistor

2SB1371

DESCRIPTION

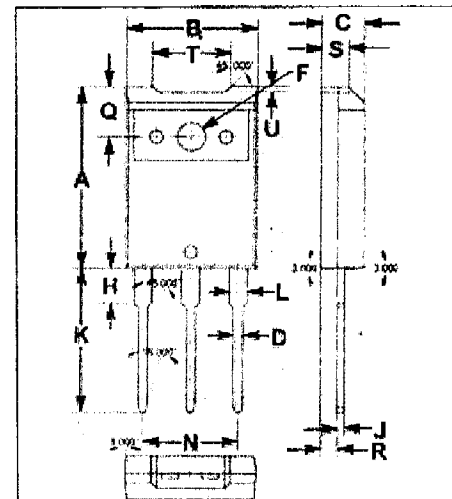
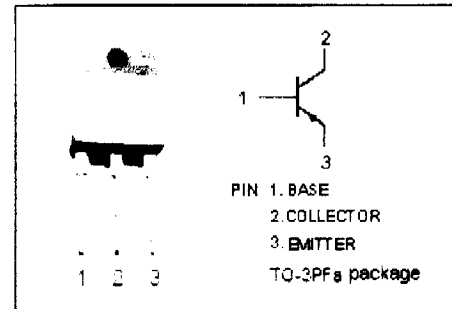
- Collector-Emitter Breakdown Voltage:
 $V_{(BR)CEO} = -120V(\text{Min})$
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Complement to Type 2SD2064

APPLICATIONS

- Designed for high power amplifications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

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	-6	A
I_{CP}	Collector Current-Pulse	-10	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	70	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	3	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



DIM	mm	
	MIN	MAX
A	20.70	21.30
B	14.70	15.30
C	4.80	5.20
D	0.90	1.10
F	3.20	3.40
H	3.70	4.30
J	0.50	0.70
K	16.40	17.00
L	1.90	2.10
N	10.80	11.00
Q	5.60	6.00
R	1.80	2.20
S	3.10	3.50
T	8.70	9.30
U	0.55	0.75



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Quality Semi-Conductors

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ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4A; I_B = -0.4A$			-2.0	V
$V_{BE(on)}$	Base -Emitter On Voltage	$I_C = -4A; V_{CE} = -5V$			-1.8	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -120V; I_E = 0$			-50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3V; I_C = 0$			-50	μA
h_{FE-1}	DC Current Gain	$I_C = -20mA; V_{CE} = -5V$	20			
h_{FE-2}	DC Current Gain	$I_C = -1A; V_{CE} = -5V$	60		200	
h_{FE-3}	DC Current Gain	$I_C = -4A; V_{CE} = -5V$	20			
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5A; V_{CE} = -5V; f = 1\text{MHz}$		15		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10V; f = 1\text{MHz}$		150		pF

◆ h_{FE-2} Classifications

Q	S	P
60-120	80-160	100-200