New Jersey Semi-Conductor Products, Inc.

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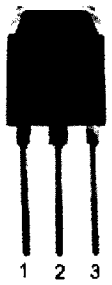
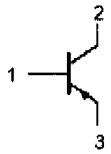
Silicon PNP Power Transistor — 2SA1941





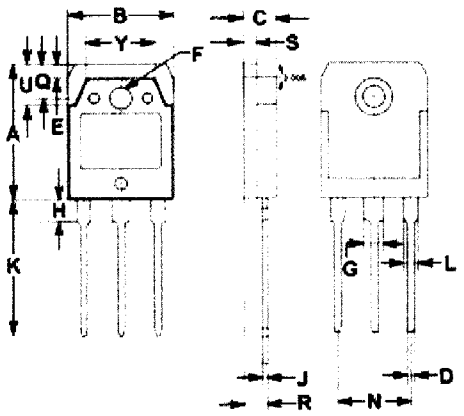
PIN 1. BASE
2. COLLECTOR
3. EMITTER
TO-3PN package

DESCRIPTION

- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$=- 2.0V(Min) @I_C=- 7A
- Good Linearity of h_{FE}
- Complement to Type 2SC5198

APPLICATIONS

- Power amplifier applications
- Recommend for 70W high fidelity audio frequency amplifier output stage applications



DIM	mm MIN	mm MAX
A	19.90	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	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
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	-140	V
V_{CEO}	Collector-Emitter Voltage	-140	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_B	Base Current-Continuous	-1	A
P_C	Collector Power Dissipation @ T_C=25℃	100	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 ; I_B= 0	-140			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -7.0A; I_B= -0.7A			-2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -5A ; V_{CE}= -5V			-1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -140V ; I_E=0			-5	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C=0			-5	μ A
h_{FE-1}	DC Current Gain	I_C= -1A ; V_{CE}= -5V	55		160	
h_{FE-2}	DC Current Gain	I_C= -5A ; V_{CE}= -5V	35			
C_{OB}	Output Capacitance	I_E=0 ; V_{CB}= -10V;f_{test}= 1.0MHz		320		pF
f_T	Current-Gain—Bandwidth Product	I_C=-1A ; V_{CE}= -5V		30		MHz