

**Silicon PNP Power Transistor**

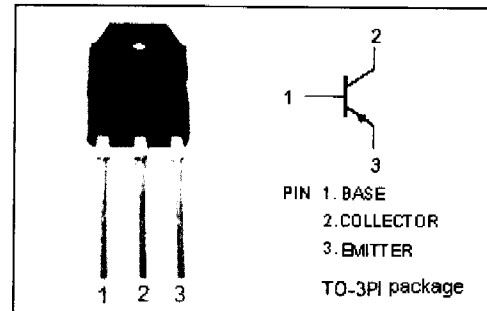
**2SA1986**

**DESCRIPTION**

- High Current Capability
- High Power Dissipation
- High Collector-Emitter Breakdown Voltage-  
 :  $V_{(BR)CEO} = -230V(\text{Min})$
- Complement to Type 2SC5358

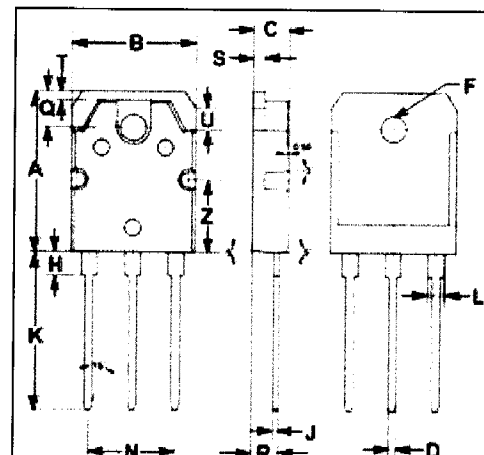
**APPLICATIONS**

- Power amplifier applications
- Recommend for 80W high fidelity audio frequency amplifier output stage applications



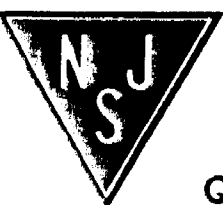
**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-230	V
$V_{CEO}$	Collector-Emitter Voltage	-230	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-15	A
$I_B$	Base Current-Continuous	-1.5	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	150	W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature Range	-55~150	°C



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.50	15.70
C	4.40	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	20.10
L	1.90	2.10
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	8.90	9.10

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.



## Silicon PNP Power Transistor

## 2SA1986

### ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -50\text{mA}$ ; $I_B = 0$	-230			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -8.0\text{A}$ ; $I_B = -0.8\text{A}$			-3.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -7\text{A}$ ; $V_{CE} = -5\text{V}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -230\text{V}$ ; $I_E = 0$			-5	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}$ ; $I_C = 0$			-5	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}$ ; $V_{CE} = -5\text{V}$	55		160	
$h_{FE-2}$	DC Current Gain	$I_C = -7\text{A}$ ; $V_{CE} = -5\text{V}$	35			
$C_{OB}$	Output Capacitance	$I_E = 0$ ; $V_{CB} = -10\text{V}$ ; $f = 1.0\text{MHz}$		360		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C = -1\text{A}$ ; $V_{CE} = -5\text{V}$		30		MHz

#### ◆ $h_{FE-1}$ Classifications

R	O
55-110	80-160