

**Silicon PNP Power Transistor**

**2SB858**

**DESCRIPTION**

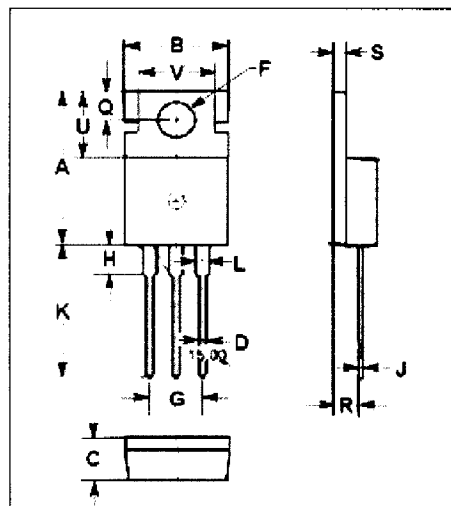
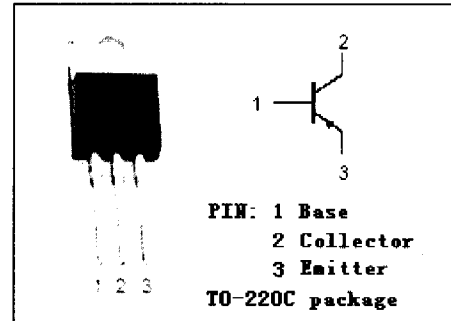
- Collector Current:  $I_C = -4A$
- Low Collector Saturation Voltage  
 :  $V_{CE(sat)} = -1.0V(Max) @ I_C = -2A$
- High Collector Power Dissipation
- Complement to Type 2SD1134

**APPLICATIONS**

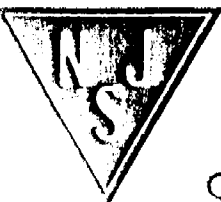
- Designed for low frequency power amplifier applications.

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-70	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-4	A
$I_{CM}$	Collector Current-Peak	-8	A
$P_C$	Total Power Dissipation @ $T_C=25^\circ C$	40	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-45~150	$^\circ C$



DIM	mm	
	MIN	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	2.88	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



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

## 2SB858

### 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	$I_C = -30\text{mA}$ ; $R_{BE} = \infty$	-60			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -10\mu\text{A}$ ; $I_E = 0$	-70			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -10\mu\text{A}$ ; $I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}$ ; $I_B = -0.2\text{A}$			-1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1\text{A}$ ; $V_{CE} = -4\text{V}$			-1.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -50\text{V}$ ; $I_E = 0$			-1	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}$ ; $V_{CE} = -4\text{V}$	60		320	
$h_{FE-2}$	DC Current Gain	$I_C = -0.1\text{A}$ ; $V_{CE} = -4\text{V}$	35			
$f_T$	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}$ ; $V_{CE} = -4\text{V}$		15		MHz

#### ◆ $h_{FE-1}$ Classifications

B	C	D
60-120	100-200	160-320