

**Silicon PNP Power Transistor**

**2SB856**

**DESCRIPTION**

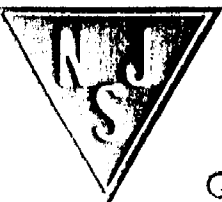
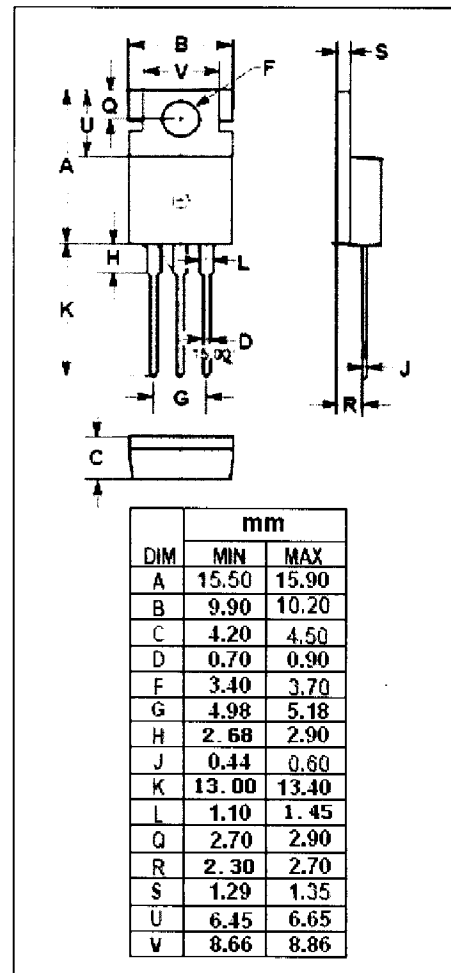
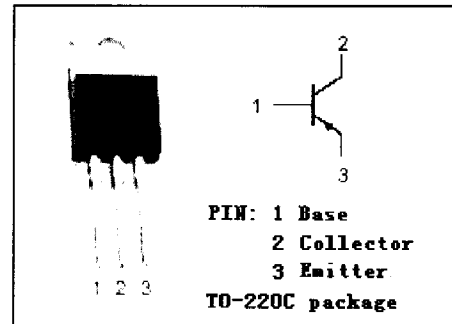
- Collector Current:  $I_C = -3A$
- Low Collector Saturation Voltage  
 $V_{CE(sat)} = -1.2V(\text{Max}) @ I_C = -2A$
- High Collector Power Dissipation

**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	-50	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-4	V
$I_C$	Collector Current-Continuous	-3	A
$P_C$	Total Power Dissipation @ $T_C = 25^\circ C$	25	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-45~150	$^\circ C$



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## 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	$I_C = -30\text{mA}$ ; $R_{BE} = \infty$	-50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -5\text{mA}$ ; $I_E = 0$	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -5\text{mA}$ ; $I_C = 0$	-4			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}$ ; $I_B = -0.2\text{A}$			-1.2	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1\text{A}$ ; $V_{CE} = -4\text{V}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -20\text{V}$ ; $I_E = 0$			-100	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -1\text{A}$ ; $V_{CE} = -4\text{V}$	35		200	
$h_{FE-2}$	DC Current Gain	$I_C = -0.1\text{A}$ ; $V_{CE} = -4\text{V}$	35			
$f_T$	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}$ ; $V_{CE} = -4\text{V}$		35		MHz

### ◆ $h_{FE-1}$ Classifications

A	B	C
35-70	60-120	100-200