

Silicon PNP Power Transistor

2SB859

DESCRIPTION

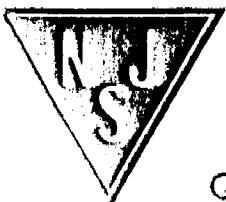
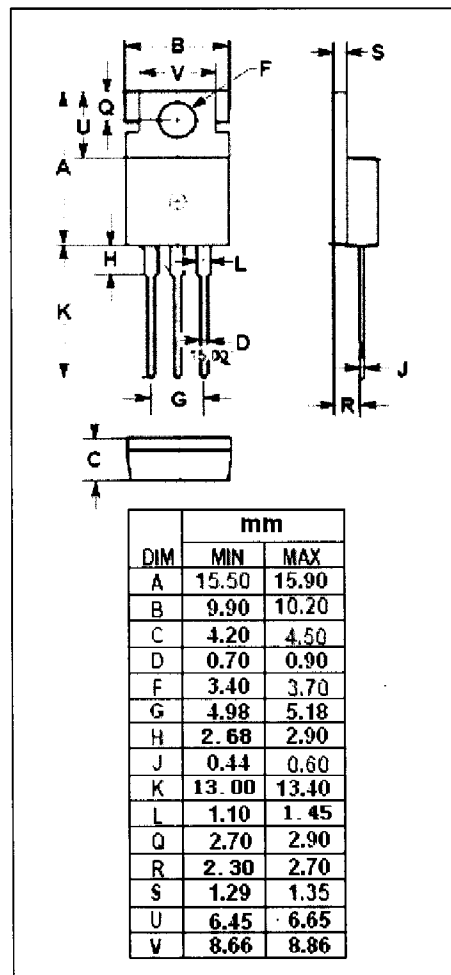
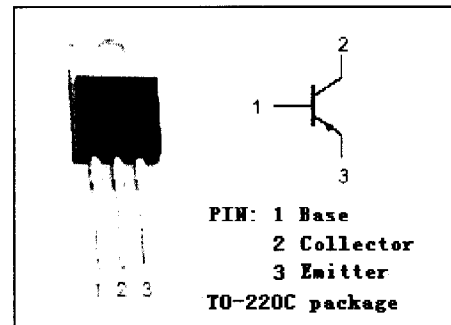
- Collector Current: $I_C = -4A$
- Low Collector Saturation Voltage
 : $V_{CE(sat)} = -2.0V(\text{Max}) @ I_C = -2A$
- High Collector Power Dissipation
- Complement to Type 2SD1135

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	-100	V
V_{CEO}	Collector-Emitter Voltage	-80	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	$^\circ C$



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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	$I_C = -30\text{mA}$; $R_{BE} = \infty$	-80			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	$I_C = -2\text{A}$; $I_B = -0.2\text{A}$			-2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -80\text{V}$; $I_E = 0$			-100	μA
h_{FE-1}	DC Current Gain	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$	60		200	
h_{FE-2}	DC Current Gain	$I_C = -0.1\text{A}$; $V_{CE} = -5\text{V}$	35			
C_{OB}	Collector Output Capacitance	$I_E = 0$; $V_{CB} = -10\text{V}$; $f = 1\text{MHz}$		75		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}$; $V_{CE} = -5\text{V}$		20		MHz

◆ h_{FE-1} Classifications

B	C
60-120	100-200