## **isc** Silicon PNP Power Transistor

# 2SB861

### **DESCRIPTION**

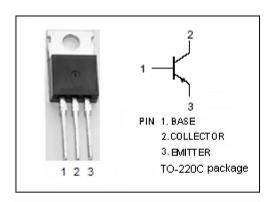
- · High Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -150V(Min)
- · Wide Area of Safe Operation
- Complement to Type 2SD1138

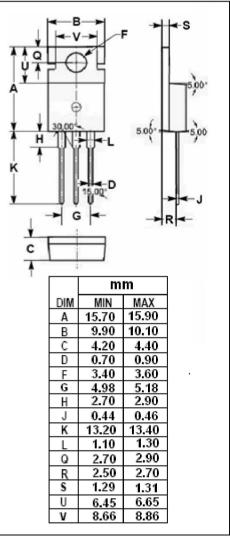
### **APPLICATIONS**

 Developed for low frequency power amplifier color TV vertical deflection output applications

ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage -200 V		٧	
V <sub>CEO</sub>	Collector-Emitter Voltage -150 V		V	
V <sub>EBO</sub>	Emitter-Base Voltage	-6	V	
Ic	Collector Current-Continuous	-2	А	
Ісм	Collector Current-Peak	-5	А	
D	Collector Power Dissipation @ T <sub>a</sub> =25℃	1.8	W	
Pc	Collector Power Dissipation @ T <sub>C</sub> =25°C	30		
TJ	Junction Temperature	150	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature Range	-45~150	°C	





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## **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25°C unless otherwise specified

iless otherwise specifica					
PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
Collector-Emitter Breakdown Voltage	$I_C$ = -50mA ; $R_{BE}$ = $\infty$	-150			٧
Emitter-Base Breakdown Voltage	I <sub>E</sub> = -5mA ; I <sub>C</sub> = 0	-6			V
Collector-Emitter Saturation Voltage	I <sub>C</sub> = -500mA; I <sub>B</sub> = -50mA			-3.0	V
Base-Emitter On Voltage	I <sub>C</sub> = -50mA ; V <sub>CE</sub> = -4V			-1.0	V
Collector Cutoff Current	V <sub>CB</sub> = -120V ; I <sub>E</sub> =0			-1	μА
DC Current Gain	I <sub>C</sub> = -50mA ; V <sub>CE</sub> = -4V	60		200	
DC Current Gain	I <sub>C</sub> = -500mA ; V <sub>CE</sub> = -10V	60			
Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> =-100V;f <sub>test</sub> = 1.0MHz		30		pF
	PARAMETER  Collector-Emitter Breakdown Voltage  Emitter-Base Breakdown Voltage  Collector-Emitter Saturation Voltage  Base-Emitter On Voltage  Collector Cutoff Current  DC Current Gain  DC Current Gain	PARAMETER       CONDITIONS         Collector-Emitter Breakdown Voltage $I_C = -50 \text{mA}$ ; $R_{BE} = \infty$ Emitter-Base Breakdown Voltage $I_C = -50 \text{mA}$ ; $I_C = 0$ Collector-Emitter Saturation Voltage $I_C = -500 \text{mA}$ ; $I_B = -50 \text{mA}$ Base-Emitter On Voltage $I_C = -50 \text{mA}$ ; $V_{CE} = -4 \text{V}$ Collector Cutoff Current $V_{CB} = -120 \text{V}$ ; $V_{CE} = -4 \text{V}$ DC Current Gain $V_C = -50 \text{mA}$ ; $V_C = -4 \text{V}$ DC Current Gain $V_C = -50 \text{mA}$ ; $V_C = -4 \text{V}$	PARAMETER       CONDITIONS       MIN         Collector-Emitter Breakdown Voltage $I_{C}$ = -50mA; $R_{BE}$ = ∞       -150         Emitter-Base Breakdown Voltage $I_{E}$ = -5mA; $I_{C}$ = 0       -6         Collector-Emitter Saturation Voltage $I_{C}$ = -500mA; $I_{B}$ = -50mA         Base-Emitter On Voltage $I_{C}$ = -50mA; $V_{CE}$ = -4V         Collector Cutoff Current $V_{CB}$ = -120V; $I_{E}$ = 0         DC Current Gain $I_{C}$ = -50mA; $V_{CE}$ = -4V       60         DC Current Gain $I_{C}$ = -500mA; $V_{CE}$ = -10V       60	PARAMETER       CONDITIONS       MIN       TYP.         Collector-Emitter Breakdown Voltage $I_C = -50 \text{mA}$ ; $R_{BE} = \infty$ -150         Emitter-Base Breakdown Voltage $I_E = -5 \text{mA}$ ; $I_C = 0$ -6         Collector-Emitter Saturation Voltage $I_C = -500 \text{mA}$ ; $I_B = -50 \text{mA}$ Base-Emitter On Voltage $I_C = -50 \text{mA}$ ; $V_{CE} = -4 \text{V}$ Collector Cutoff Current $V_{CB} = -120 \text{V}$ ; $I_E = 0$ DC Current Gain $I_C = -50 \text{mA}$ ; $V_{CE} = -4 \text{V}$ 60         DC Current Gain $I_C = -500 \text{mA}$ ; $V_{CE} = -10 \text{V}$ 60	PARAMETER       CONDITIONS       MIN       TYP.       MAX         Collector-Emitter Breakdown Voltage $I_C = -50 \text{mA}$ ; $R_{BE} = \infty$ -150         Emitter-Base Breakdown Voltage $I_C = -50 \text{mA}$ ; $I_C = 0$ -6         Collector-Emitter Saturation Voltage $I_C = -500 \text{mA}$ ; $I_B = -50 \text{mA}$ -3.0         Base-Emitter On Voltage $I_C = -50 \text{mA}$ ; $V_{CE} = -4V$ -1.0         Collector Cutoff Current $V_{CB} = -120V$ ; $I_E = 0$ -1         DC Current Gain $I_C = -50 \text{mA}$ ; $V_{CE} = -4V$ 60       200         DC Current Gain $I_C = -500 \text{mA}$ ; $V_{CE} = -10V$ 60       -1

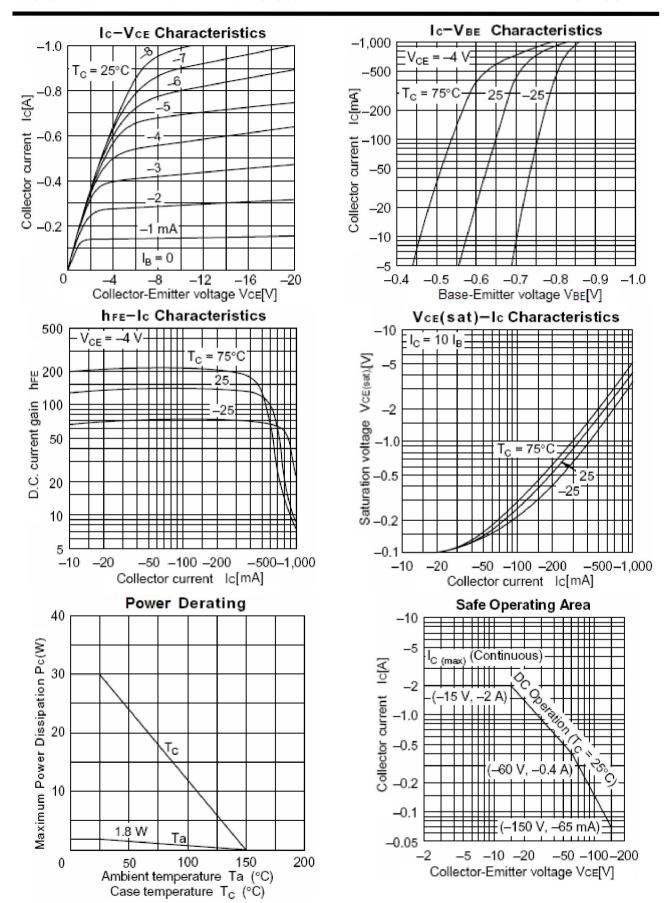
## ♦ h<sub>FE-1</sub> Classifications

В	С		
60-120	100-200		

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isc website: www.iscsemi.cn