

## **isc Silicon NPN Power Transistor**

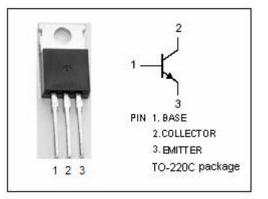
# 2SD1137

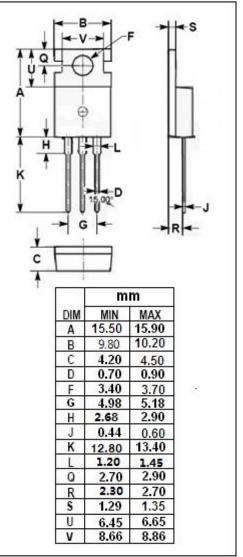
### DESCRIPTION

- High Collector-Emitter Breakdown Voltage-: V<sub>(BR)CEO</sub>= 100V (Min)
- Wide Area of Safe Operation
- Complement to Type 2SB860
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### APPLICATIONS

Designed for low frequency power amplifier TV vertical deflection output applications





## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>сво</sub>	Collector-Base Voltage	100	V	
V <sub>CEO</sub>	Collector-Emitter Voltage 100		V	
V <sub>EBO</sub>	Emitter-Base Voltage 4		V	
lc	Collector Current-Continuous	4	A	
I <sub>CM</sub>	Collector Current-Peak	5	А	
Pc	Collector Power Dissipation @ T <sub>a</sub> =25°C	1.8	w	
	Collector Power Dissipation @ T <sub>c</sub> =25°C	40		
TJ	Junction Temperature	150	Ĉ	
T <sub>stg</sub>	Storage Temperature Range	-45~150	°C	

isc website: <u>www.iscsemi.com</u>

## <sup>1</sup> *isc & iscsemi* is registered trademark



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## ELECTRICAL CHARACTERISTICS

#### $T_{c}\text{=}25^{\circ}\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA; R <sub>BE</sub> = ∞	100			v
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	4			v
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1A; I <sub>B</sub> = 0.1A			1.0	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = 80V; R <sub>BE</sub> = ∞			100	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 3.5V; I <sub>C</sub> = 0			50	μA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 500mA; V <sub>CE</sub> = 4V	50		250	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 50mA; V <sub>CE</sub> = 4V	25		350	

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