

isc Silicon PNP Power Transistor

2SB870

DESCRIPTION

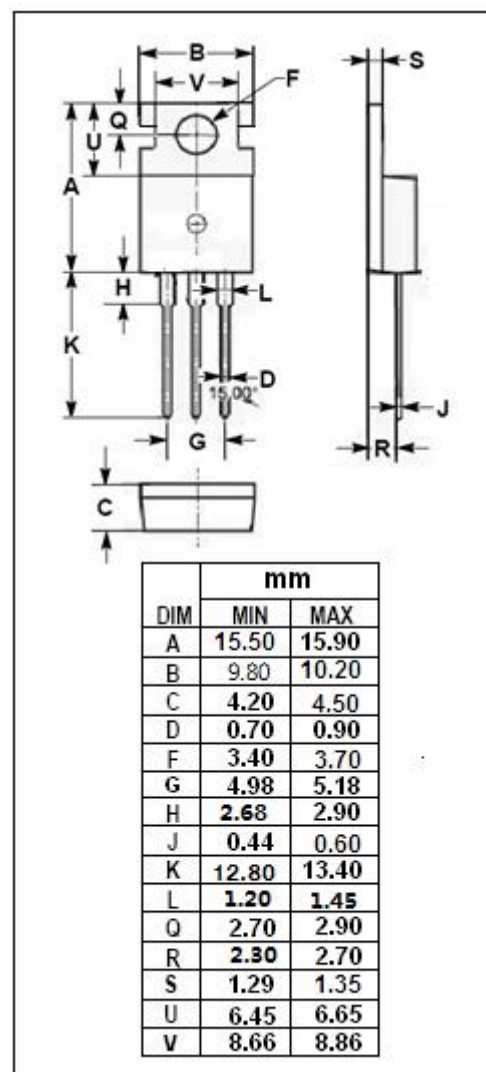
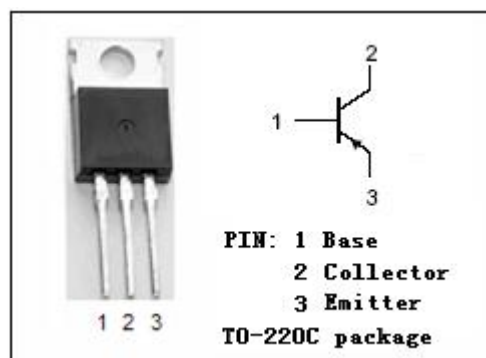
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -80V(\text{Min})$
- Good Linearity of h_{FE}
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.5V(\text{Max})@I_C = -5A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power switching applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-130	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-7	A
I_{CM}	Collector Current-Peak	-15	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	40	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SB870****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA; I _B = 0	-80			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -5A; I _B = -0.25A			-0.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -5A; I _B = -0.25A			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-50	μ A
h _{FE-1}	DC Current Gain	I _C = -0.1A; V _{CE} = -2V	45			
h _{FE-2}	DC Current Gain	I _C = -3A; V _{CE} = -2V	60		260	

◆ h_{FE-2} Classifications

R	Q	P
60-120	90-180	130-260

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