

isc Silicon PNP Power Transistor

2SB850

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -40V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = -1.2V(\text{Max}) @ I_C = -5A$
- Wide Area of Safe Operation
- Complement to Type 2SD1117

APPLICATIONS

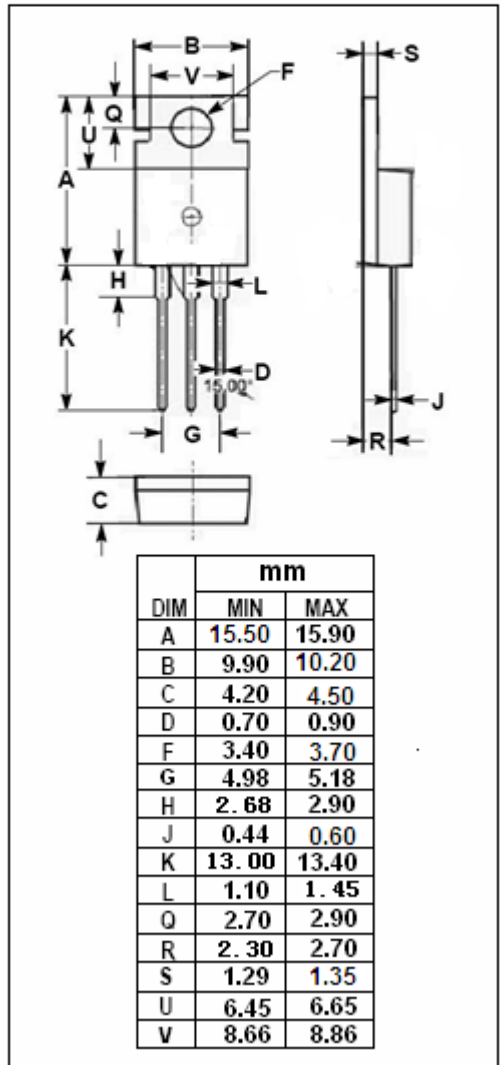
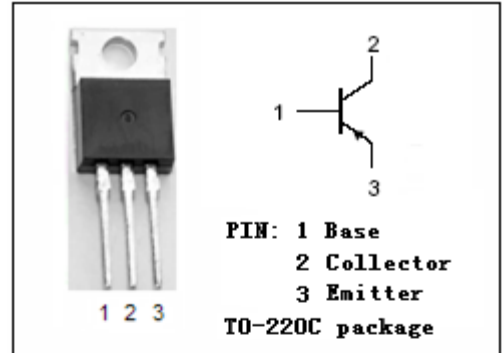
- Designed for audio amplifier, series regulators and general purpose power amplifiers.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-10	A
I_B	Base Current-Continuous	-2	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	50	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ\text{C/W}$



isc Silicon PNP Power Transistor**2SB850****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	$I_C = -10\text{mA}; I_B = 0$	-40			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -0.1\text{mA}; I_E = 0$	-40			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -0.1\text{mA}; I_C = 0$	-7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -5\text{A}; I_B = -0.5\text{A}$			-1.2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -5\text{A}; I_B = -0.5\text{A}$			-2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -40\text{V}; I_E = 0$			-10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -7\text{V}; I_C = 0$			-10	μA
h_{FE}	DC Current Gain	$I_C = -2\text{A}; V_{CE} = -5\text{V}$	40		240	