

isc Silicon PNP Darlington Power Transistor
2SB601
DESCRIPTION

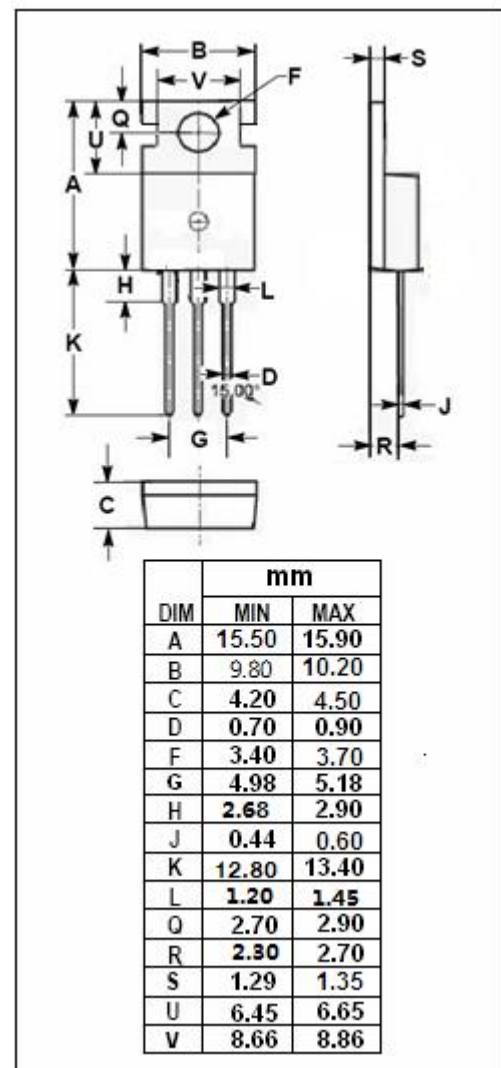
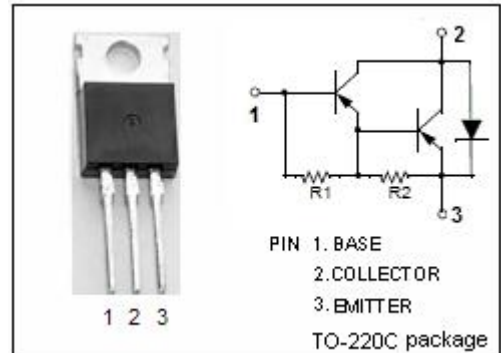
- High DC Current Gain-
: $h_{FE} = 2000(\text{Min})@ I_C = -3\text{A}$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(\text{SUS})} = -100\text{V}(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(\text{sat})} = -1.5\text{V}(\text{Max})@ I_C = -3\text{A}$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in low-frequency power amplifiers and low-speed switching applications.
- Ideal for use in direct drive from IC output for magnet drivers such as terminal equipment or cash registers.

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
I_B	Base Current-DC	-0.5	A
P_C	Collector Power Dissipation $T_C=25^\circ\text{C}$	30	W
	Collector Power Dissipation $T_a=25^\circ\text{C}$	1.5	
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



isc Silicon PNP Darlington Power Transistor**2SB601****ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A, I _B = -3mA			-1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -3A, I _B = -3mA			-2.0	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			-3	mA
h _{FE-1}	DC Current Gain	I _C = -3A; V _{CE} = -2V	2000		15000	
h _{FE-2}	DC Current Gain	I _C = -5A; V _{CE} = -2V	500			

◆ **h_{FE-1} Classifications**

M	L	K
2000-5000	3000-7000	5000-15000

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