

isc Silicon PNP Darlington Power Transistor

2SB1100

DESCRIPTION

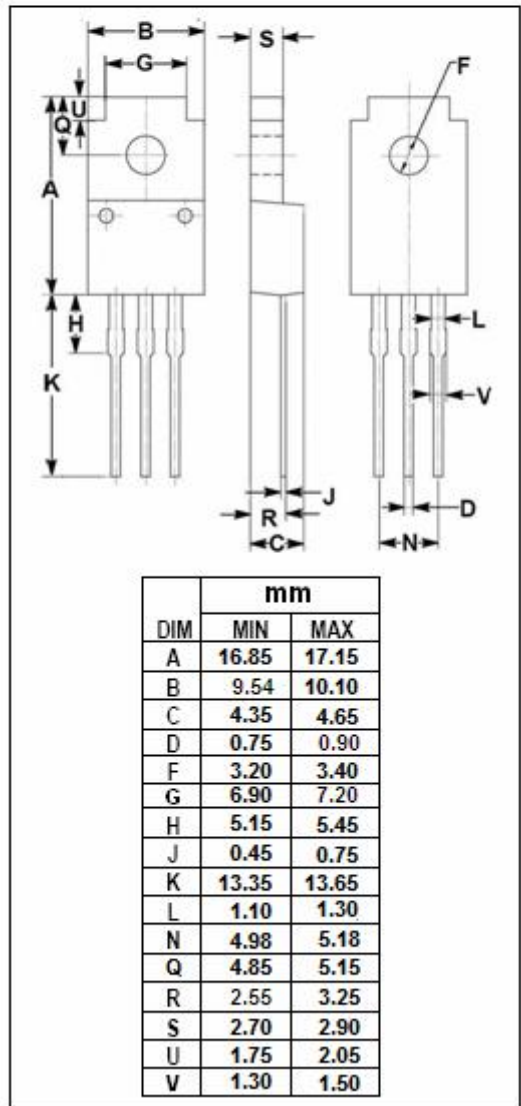
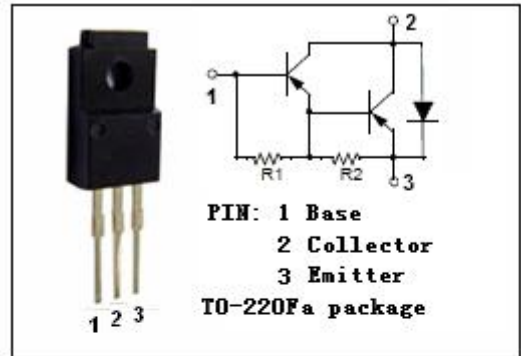
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -100V(\text{Min})$
- High DC Current Gain-
: $h_{FE} = 1000(\text{Min}) @ I_c = -10A$
- Complement to Type 2SD1591

APPLICATIONS

- Designed for audio frequency power amplifier and low speed high current switching industrial use.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-8	V
I_c	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Pulse	-20	A
I_B	Base Current-Continuous	-1	A
P_C	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	30	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



isc Silicon PNP Darlington Power Transistor

2SB1100

ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -25mA			-1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -10A; I _B = -25mA			-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}	DC Current Gain	I _C = -10A; V _{CE} = -2V	1000		30000	

Switching Times

t _{on}	Turn-on Time			1.0		μ s
t _{stg}	Storage Time	V _{CC} ≈ -50V, R _L = 5 Ω, I _C = -10A; I _{B1} = -I _{B2} = -25mA,		5.0		μ s
t _f	Fall Time			2.0		μ s

◆ h_{FE} Classifications

M	L	K	J
1000-3000	2000-5000	4000-10000	8000-30000