

isc Silicon PNP Darlington Power Transistor

2SB1100

DESCRIPTION

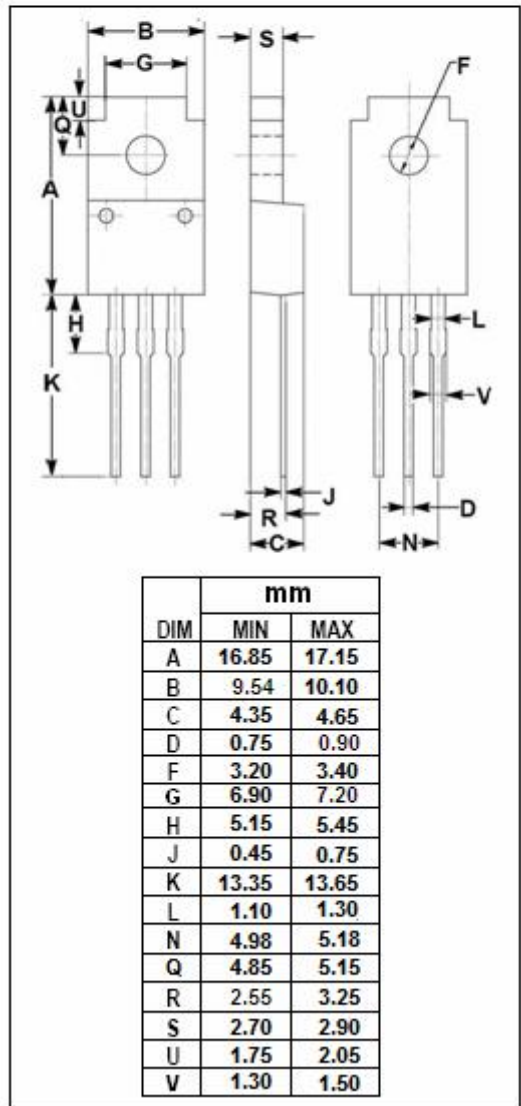
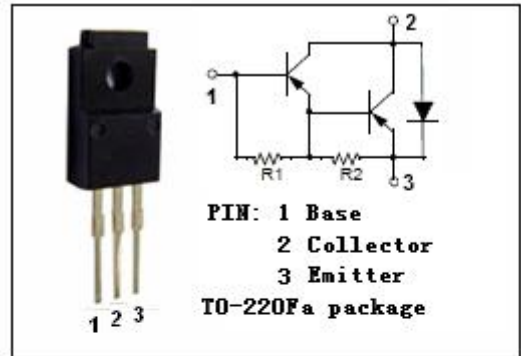
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -100V(\text{Min})$
- High DC Current Gain-  
:  $h_{FE} = 1000(\text{Min}) @ I_c = -10A$
- Complement to Type 2SD1591

APPLICATIONS

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

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

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 @ $T_a=25^\circ C$	2	W
	Collector Power Dissipation @ $T_c=25^\circ C$	30	
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature	-55~150	$^\circ C$



**isc Silicon PNP Darlington Power Transistor****2SB1100****ELECTRICAL CHARACTERISTICS**T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10A; I <sub>B</sub> = -25mA			-1.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -10A; I <sub>B</sub> = -25mA			-2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -100V; I <sub>E</sub> = 0			-10	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-3	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -10A; V <sub>CE</sub> = -2V	1000		30000	

## Switching Times

t <sub>on</sub>	Turn-on Time			1.0		μ s
t <sub>stg</sub>	Storage Time	V <sub>CC</sub> ≈ -50V, R <sub>L</sub> = 5 Ω, I <sub>C</sub> = -10A; I <sub>B1</sub> = -I <sub>B2</sub> = -25mA,		5.0		μ s
t <sub>f</sub>	Fall Time			2.0		μ s

◆ h<sub>FE</sub> Classifications

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