

Silicon PNP Darlington Power Transistors

2SB1626

DESCRIPTION

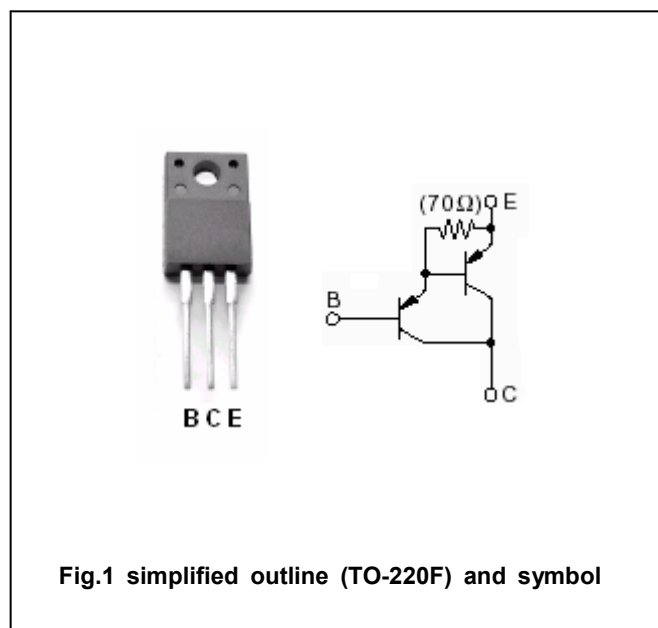
- With TO-220F package
- Complement to type 2SD2495

APPLICATIONS

- For audio, series regulator and general purpose applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-110	V
V_{CEO}	Collector-emitter voltage	Open base	-110	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-6	A
I_B	Base current		-1	A
P_C	Collector dissipation	$T_C=25^\circ\text{C}$	30	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon PNP Darlington Power Transistors

2SB1626

CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-50mA; I_B=0$	-110			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-5A; I_B=-5mA$			-2.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=-5A; I_B=-5mA$			-3.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=-110V; I_E=0$			-0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V; I_C=0$			-0.1	mA
h_{FE}	DC current gain	$I_C=-5A; V_{CE}=-4V$	5000			
f_T	Transition frequency	$I_C=-0.5A; V_{CE}=-12V$		100		MHz
C_{OB}	Collector output capacitance	$f=1MHz; V_{CB}=-10V$		110		pF

Switching times

t_{on}	Turn-on time	$I_C=-5A; I_{B1}=-I_{B2}=-5mA$ $V_{CC}=30V, R_L=6\Omega$		1.1		μs
t_s	Storage time			3.2		μs
t_f	Fall time			1.1		μs

◆ h_{FE} Classifications

O	p	Y
5000-12000	6500-20000	15000-30000

2SB1626

Technical drawing showing three views of a vertical structure with dimensions in millimeters (mm) and tolerances.

Front Elevation (Left):

- Overall width: 10.00 ± 0.10
- Overall height: 15.00
- Top section width: 6.50
- Top section height: 5.00
- Central circle diameter: $\varnothing 3.20$
- Four smaller circles: 2- $\varnothing 1.20$ and 2- $\varnothing 1.50$
- Bottom section height: 18.80
- Bottom section width: 5.10
- Bottom section height: 28.50
- Bottom section width: 1.20
- Bottom section height: 0.80 ± 0.05

Side Elevation (Middle):

- Overall width: 4.50
- Overall height: 15.00
- Top flange width: 2.75
- Top flange height: 1.40
- Top flange height: 5.00
- Top flange height: 5.00
- Top flange height: 6.50
- Top flange height: 15.00
- Top flange height: 5.00
- Top flange height: 5.00
- Top flange height: 2.30
- Top flange height: 0.60

Top View (Right):

- Overall width: 6.50
- Overall height: 15.00 ± 0.05
- Top section width: 6.50
- Top section height: 1.60
- Central circle diameter: $\varnothing 3.20$
- Two smaller circles: 2- $\varnothing 1.20$