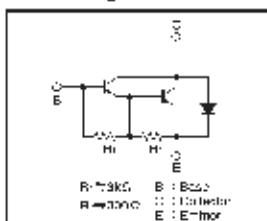


Power Transistor (-80V, -4A)

2SB1474 / 2SB1342

Features

- 1) Darlington connection for a high h_{FE}.
- 2) Built-in resistor between base and emitter.
- 3) Built-in diodes (diode).
- 4) Complements the 2SD1933.

Circuit diagram**Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Mn.	Typ	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CEO}	-80	—	—	V	$I_C = -50 \mu A$
Collector-emitter breakdown voltage	BV _{CEO}	-80	—	—	V	$I_E = -1 mA$
Collector cutoff current	I _{CCS}	—	—	-100	μA	$V_{CE} = -80V$
Emitter cutoff current	I _{ECSS}	—	3	mA	V _{CE} = 0V	
Collector-emitter saturation voltage	V _{CE(sat)}	—	-1.5	—	V	$I_C = -2AU = 4mA$
DC current transfer ratio	h _{FE}	1000	5000	10000	—	$V_{CE} = -5V, I_C = 2A$
Transition frequency	f _T	—	12	—	MHz	$V_{CE} = -5V, I_C = 0.5A, f = 10MHz$
Output capacitance	C _{OB}	—	45	—	pF	$V_{CE} = -10V, f = 1MHz, I_C = 1A$

*1: Measured at no load current. *2: Transition frequency of the device.

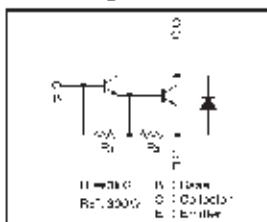
(94S-181-B400)

Power Transistor (80V, 4A)

2SD1933

Features

- 1) Darlington connection for a high h_{FE}.
- 2) Built-in resistor between base and emitter.
- 3) Built-in diodes (diode).
- 4) Complements the 2SB1342.

Circuit diagram**Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Mn.	Typ	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV _{CEO}	80	—	—	V	$I_C = 1mA$
Collector-base breakdown voltage	BV _{CEO}	80	—	—	V	$I_E = 50 \mu A$
Collector cutoff current	I _{CCS}	—	—	100	μA	$V_{CE} = 80V$
Emitter cutoff current	I _{ECSS}	—	3	mA	V _{CE} = 0V	
Collector-emitter saturation voltage	V _{CE(sat)}	—	1.5	—	V	$I_C = 2AU = 4mA$
DC current transfer ratio	h _{FE}	1000	—	10000	—	$V_{CE} = -5V/2A$
Transition frequency	f _T	—	40	—	MHz	$V_{CE} = -5V, I_C = 0.5A, f = 10MHz$
Output capacitance	C _{OB}	—	30	—	pF	$V_{CE} = -10V, f = 1MHz, I_C = 1A$

*1: Measured at no load current.

*2: Transition frequency of the device.

(94L-906-D400)