

2SB1474 / 2SB1342

1. Darlington connect on for a high hfe.
2. B-L 1-in resistor between base and emitter.
3. B-L 1-in diode do co.
4. Complement is the 2SD 933.

$R_1 = 30k\Omega$ $B = 7410$
 $R_2 = 330\Omega$ $D_1 = 1N4148$
 $E = ETL2802$

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CB0}	-80	—	—	V	$I_C = -50 \mu A$
Collector-emitter breakdown voltage	BV_{CE0}	-80	—	—	V	$I_C = -1 mA$
Collector cutoff current	I_{CE0}	—	—	-100	μA	$V_{CE} = -90V$
Emitter cutoff current	I_{EE0}	—	—	3	mA	$V_{BE} = 5V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	-1	-1.5	V	$I_E = -20 \sim -4mA$
DC current transfer ratio	h_{FE}	1000	5000	10000		$V_{CE} = -20 \sim 2A$
Transition frequency	f_T	—	12	—	MHz	$V_{CE} = -5V, I_C = 0.5A, f = 10MHz$
Output capacitance	C_{ob}	—	45	—	pF	$V_{CE} = -10V, f = 0.1 \sim 1MHz$

¹⁰⁸ Moshe and Anna were married. ¹⁰⁹ The main character of the novel.

Parameter	Symbol	Units	Unit
Collector-base voltage	V_{CB}	80	V
Collector-emitter voltage	V_{CE}	-80	V
Emitter-base voltage	V_{EB}	-7	V
Collector current	I_C	-1 -6	A (DC) A
Collector power dissipation	2SB117	1	W
		10	W ($T_C=25^{\circ}\text{C}$)
	2SB1342	5	W
		30	W ($T_J=25^{\circ}\text{C}$)
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

* Style 2.4% PV=10Cms

Type	3B1474	3B1542
Packaging	QPT3	TOL-000FF
h _{FE}	1k~10k	1k~10k
Case	IL	
Base connection (pin)	B3C	G3D

2SD1933

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

[illegible]

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV_{CEO}	80	—	—	V	$I_C=1\text{ mA}$
Collector-base breakdown voltage	BV_{CBO}	80	—	—	V	$I_C=50\text{ }\mu\text{A}$
Collector output current	I_{CO}	—	—	100	μA	$V_{CE}=50\text{V}$
Emitter-base current	I_{EB}	—	—	3	mA	$V_{BE}=5\text{V}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	1.5	—	V	$I_{CE}=20\text{ mA}$
DC current transfer ratio	h_{FE}	1000	—	10000	—	$V_{CE}=5\text{V}$
Transition frequency	f_T	—	40	—	MHz	$V_{CE}=5\text{V}$, $I_C=0.5\text{ mA}$, $f=10\text{ MHz}$
Output capacitance	C_{ob}	—	30	—	pF	$V_{CE}=10\text{V}$, $I_C=5\text{ mA}$, $f=1\text{ MHz}$

W: Measured and planned	W: Transferability of the device
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Parameter	Symbol	Units	Min
Collector-base voltage	V_{CB}	V	V
Collector-emitter voltage	V_{CE}	V	V
Emitter-base voltage	V_{EB}	V	V
Collector current	I_C	A	A_{DC}
		A	A_{Puls}
Collector power dissipation	P_C	W	W
		W	$W(T_a = 25^\circ C)$
Junction temperature	T_J	$^\circ C$	150
Storage temperature	T_{Stg}	$^\circ C$	-55 to $+100$

* Санкт-Петербург, 1998-1999 гг.

Type	2501602
Package	10-2201 F
htc	1K-10K
Date	—
Basic ordering unit (pieces)	500