# 2SD1934

### Silicon NPN epitaxial planer type

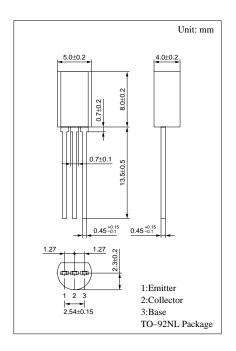
For low-frequency power amplification For stroboscope

#### Features

- Low collector to emitter saturation voltage V<sub>CE(sat)</sub>.
- Satisfactory operation performances at high efficiency with the low-voltage power supply.
- Allowing supply with the radial taping.

#### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	40	V
Collector to emitter voltage	$V_{CEO}$	20	V
Emitter to base voltage	$V_{\rm EBO}$	7	V
Peak collector current	$I_{CP}$	8	A
Collector current	$I_{C}$	5	A
Collector power dissipation	$P_{C}$	1	W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	$T_{\rm stg}$	<b>−55 ~ +150</b>	°C



#### Electrical Characteristics (Ta=25°C)

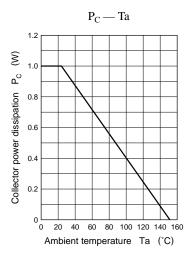
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 10V, I_{E} = 0$			0.1	μΑ
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 7V, I_{C} = 0$			0.1	μΑ
Collector to emitter voltage	V <sub>CEO</sub>	$I_{C} = 1 \text{mA}, I_{B} = 0$	20			V
Emitter to base voltage	V <sub>EBO</sub>	$I_E = 10 \mu A, I_C = 0$	7			V
Forward current transfer ratio	h <sub>FE1</sub> *1	$V_{CE} = 2V, I_C = 0.5A^{*2}$	230		600	
	h <sub>FE2</sub>	$V_{CE} = 2V, I_C = 2A^{*2}$	150			
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = 3A, I_B = 0.1A^{*2}$			1	V
Transition frequency	$f_T$	$V_{CB} = 6V, I_E = -50mA, f = 200MHz$		150		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = 20V, I_E = 0, f = 1MHz$			50	pF

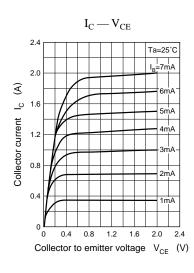
<sup>\*2</sup> Pulse measurement

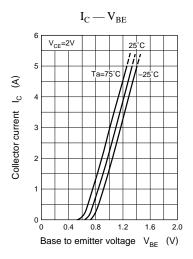
<sup>\*1</sup>hFE1 Rank classification

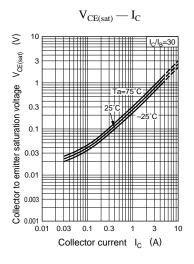
Rank	Q	R		
h <sub>FE1</sub>	230 ~ 380	340 ~ 600		

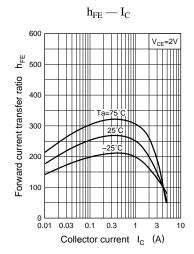
Transistor 2SD1934

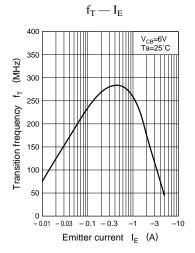


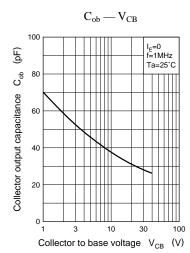












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