

2SC4934

Silicon NPN Epitaxial

Application

High voltage amplifier

Ordering Information

	h_{FE}
2SC4934D	250 to 500
2SC4934E	400 to 800

TO-126FM



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	120	V
Collector to emitter voltage	V_{CEO}	120	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	0.2	A
Collector power dissipation	P_C	1.5	W
Collector power dissipation	P_C^{*1}	8	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Note: 1. Value at $T_C = 25^\circ\text{C}$.

2SC4934

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	120	—	—	V	$I_C = 10 \mu A,$ $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	120	—	—	V	$I_C = 1 \text{ mA},$ $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu A,$ $I_C = 0$
Collector cutoff current	I_{CBO}	—	—	10	μA	$V_{CB} = 80 \text{ V},$ $I_E = 0$
DC current transfer ratio	2SC4934D	h_{FE}	250	—	500	$V_{CE} = 5 \text{ V},$ $I_C = 10 \text{ mA}$
	2SC4934E	h_{FE}	400	—	800	
Base to emitter voltage	V_{BE}	—	—	1.0	V	$V_{CE} = 5 \text{ V},$ $I_C = 10 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	1.0	V	$I_C = 200 \text{ mA},$ $I_B = 20 \text{ mA}$
Gain bandwidth product	f_T	—	350	—	MHz	$V_{CE} = 10 \text{ V},$ $I_E = 50 \text{ mA}$
Collector output capacitance	C_{ob}	—	3.5	—	pF	$V_{CB} = 30 \text{ V},$ $I_E = 0,$ $f = 1 \text{ MHz}$

See characteristic curves of 2SC4046.

Maximum Collector Power Dissipation Curve

