HITACHI

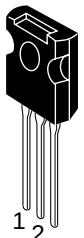
2SC4934

Silicon NPN Epitaxial

Application

High voltage amplifier

TO–126FM



1. Emitter
2. Collector
3. Base

Ordering Information

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

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	Tstg	–55 to +150	°C

Note: 1. Value at T_C = 25°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 µA, I_E = 0
Collector to emitter breakdown voltage		$V_{(BR)CEO}$	120	—	—	V	I_C = 1 mA, R_{BE} = ∞
Emitter to base breakdown voltage		$V_{(BR)EBO}$	5	—	—	V	I_E = 10 µA, I_C = 0
Collector cutoff current		I_{CBO}	—	—	10	µA	V_{CB} = 80 V, I_E = 0
DC current transfer ratio	2SC4934D	h_{FE}	250	—	500		V_{CE} = 5 V, I_C = 10 mA
	2SC4934E	h_{FE}	400	—	800		
Base to emitter voltage		V_{BE}	—	—	1.0	V	V_{CE} = 5 V, I_C = 10 mA
Collector to emitter saturation voltage		$V_{CE(sat)}$	—	—	1.0	V	I_C = 200 mA, I_B = 20 mA
Gain bandwidth product		f_T	—	350	—	MHz	V_{CE} = 10 V, I_E = 50 mA
Collector output capacitance		Cob	—	3.5	—	pF	V_{CB} = 30 V, I_E = 0, f = 1 MHz

See characteristic curves of 2SC4046.

Maximum Collector Power Dissipation Curve