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# 2SC4934

Silicon NPN Epitaxial

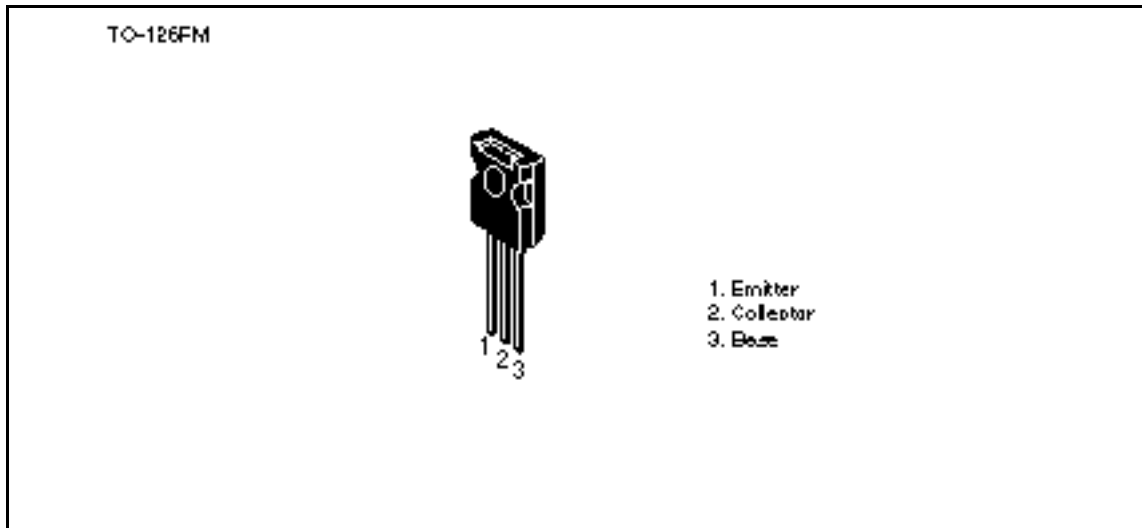
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## Application

High voltage amplifier

## Outline



## Ordering Information

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

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## 2SC4934

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

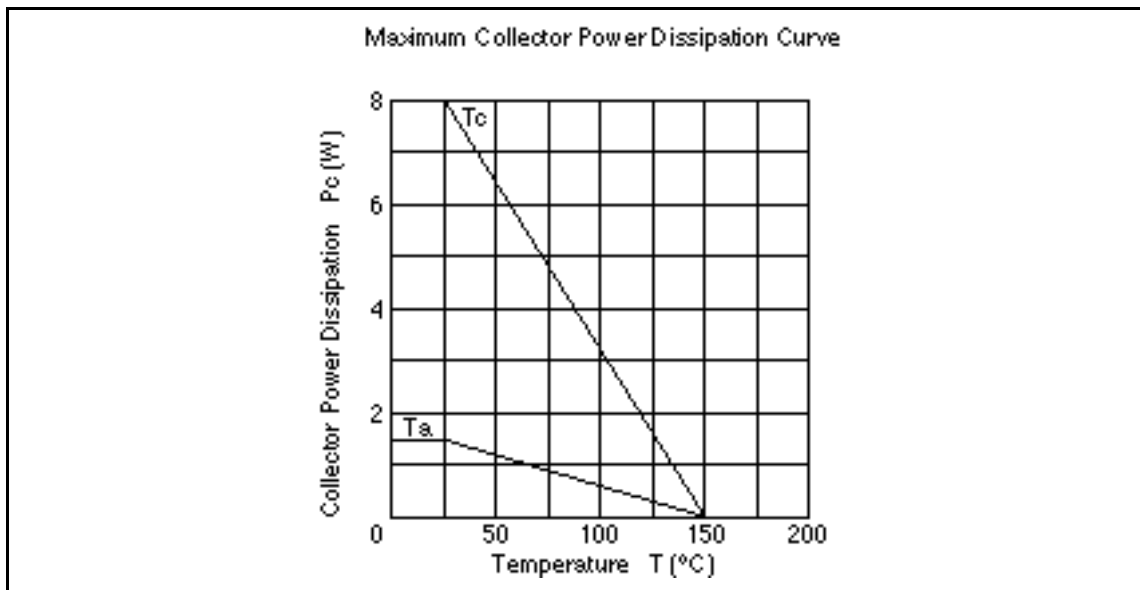
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	120	V
Collector to emitter voltage	$V_{CEO}$	120	V
Emitter to base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	0.2	A
Collector power dissipation	$P_C$	1.5	W
	$P_C^{*1}$	8	
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55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

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

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

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	120	—	—	V	$I_C = 10 \mu\text{A}$ , $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	120	—	—	V	$I_C = 1 \text{ mA}$ , $R_{BE} =$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu\text{A}$ , $I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	10	$\mu\text{A}$	$V_{CB} = 80 \text{ V}$ , $I_E = 0$
DC current transfer ratio	2SC4934D $h_{FE}$	250	—	500		$V_{CE} = 10 \text{ V}$ , $I_C = 10 \text{ mA}$
	2SC4934E $h_{FE}$	400	—	800		
Base to emitter voltage	$V_{BE}$	—	—	1.0	V	$V_{CE} = 10 \text{ V}$ , $I_C = 10 \text{ mA}$
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.



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## **Hitachi, Ltd.**

Semiconductor & IC Div.  
Nippon Bldg., 2-6-2, Ohite-machi, Chiyoda-ku, Tokyo 100, Japan  
Tel: Tokyo (03) 3270-2111  
Fax: (03) 3270-5109

For further information write to:

**Hitachi America, Ltd.**  
Semiconductor & IC Div.  
2000 Sierra Point Parkway  
Brisbane, CA 94005-4835  
U.S.A.  
Tel: 415-589-8300  
Fax: 415-589-4207

**Hitachi Europe GmbH**  
Electronic Components Group  
Continental Europe  
Dannecker Straße 3  
D-85622 Feldkirchen  
München  
Tel: 089-9 24 80-0  
Fax: 089-9 29 30 00

**Hitachi Europe Ltd.**  
Electronic Components Div.  
Northern Europe Headquarters  
Whitebrook Park  
Lower Cookham Road  
Maidenhead  
Berkshire SL6 6YA  
United Kingdom  
Tel: 0628-885000  
Fax: 0628-778322

**Hitachi Asia Pte. Ltd.**  
45 Collyer Quay #20-00  
Hitachi Tower  
Singapore 0404  
Tel: 535-2100  
Fax: 535-1533

**Hitachi Asia (Hong Kong) Ltd.**  
Unit 705, North Tower,  
World Finance Centre  
Harbour City, Canton Road  
Tsim Sha Tsui, Kowloon  
Hong Kong  
Tel: 27359218  
Fax: 27308074