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# 2SC4829

Silicon NPN Epitaxial

# HITACHI

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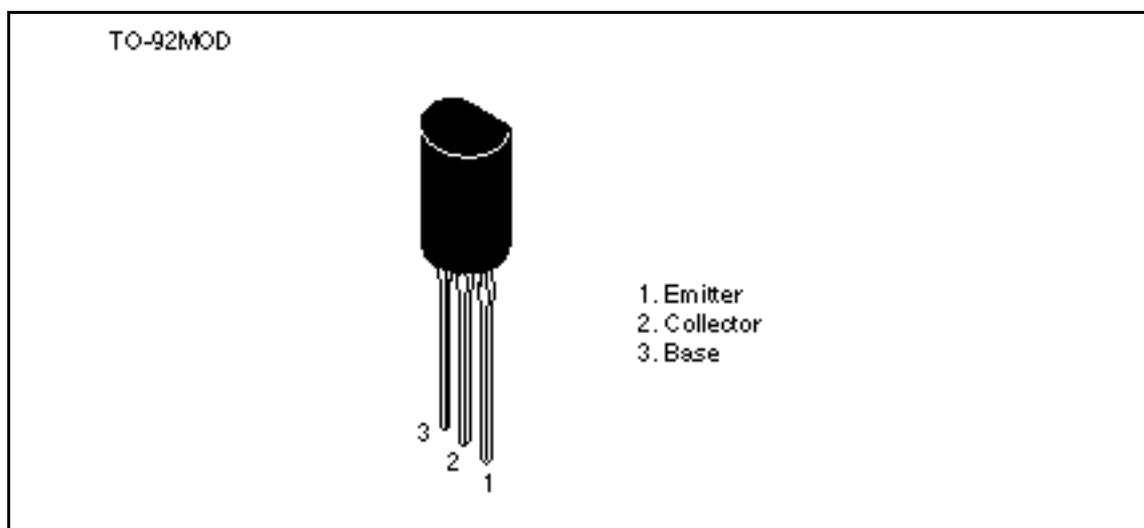
## Application

High frequency amplifier

## Features

- High frequency characteristics  
 $f_T = 1100$  MHz Typ
- High voltage and small output capacitance  
 $V_{CEO} = 100$  V,  $C_{ob} = 4.2$  pF Typ
- Suitable for wide band video amplifier

## Outline



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## 2SC4829

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### Ordering Information

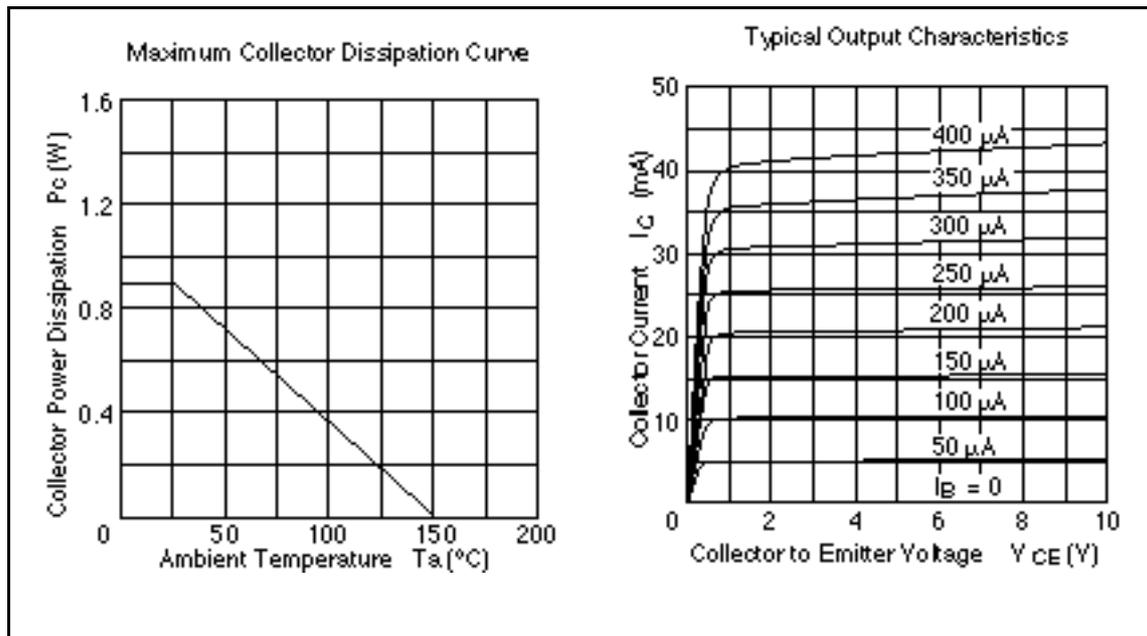
	$h_{FE}$
2SC4829B	60 to 120
2SC4829C	100 to 200

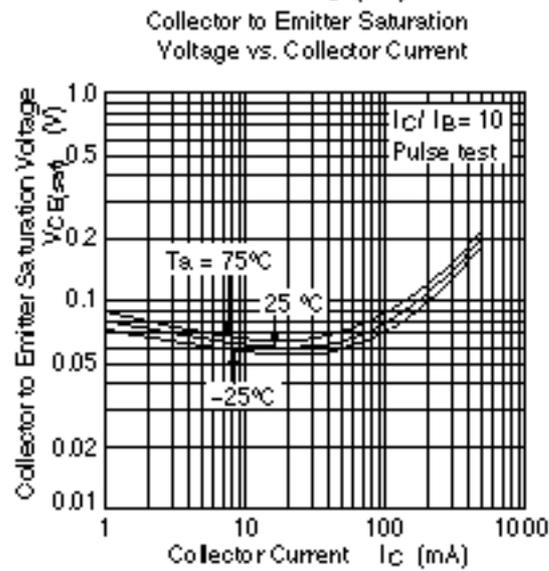
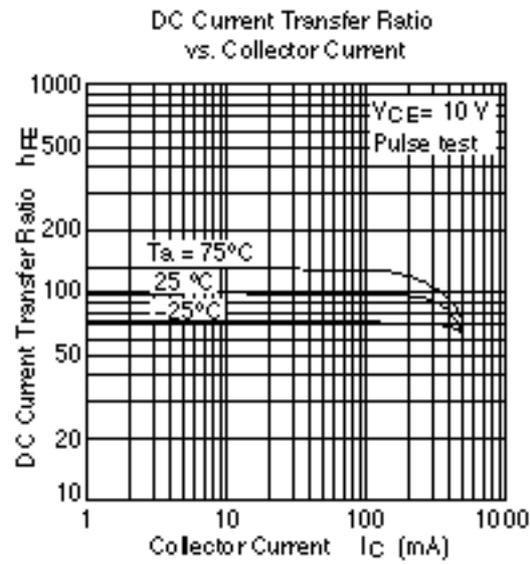
### Absolute Maximum Ratings (Ta = 25°C)

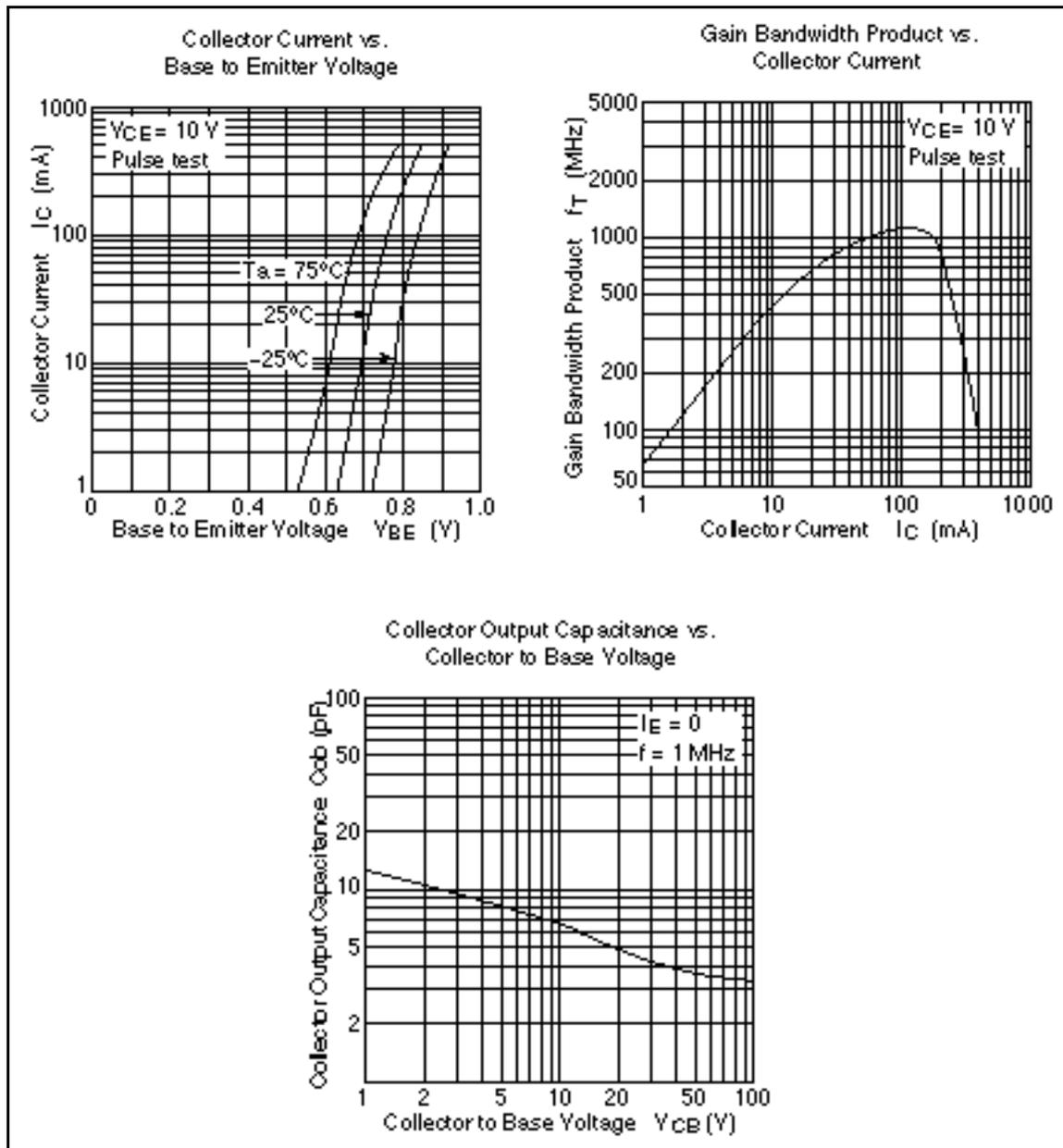
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	100	V
Collector to emitter voltage	$V_{CEO}$	100	V
Emitter to base voltage	$V_{EBO}$	3	V
Collector current	$I_C$	0.2	A
Collector peak current	$i_{C(\text{peak})}$	0.5	A
Collector power dissipation	$P_C$	0.9	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

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

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	100	—	—	V	$I_C = 10 \mu\text{A}$ , $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	100	—	—	V	$I_C = 1 \text{ mA}$ , $R_{BE} =$
Emitter cutoff current	$I_{EBO}$	—	—	10	$\mu\text{A}$	$V_{EB} = 3 \text{ V}$ , $I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	1.0	$\mu\text{A}$	$V_{CB} = 80 \text{ V}$ , $I_E = 0$
DC current transfer ratio	2SC4829B	$h_{FE}$	60	—	120	$V_{CE} = 10 \text{ V}$ , $I_C = 10 \text{ mA}$
	2SC4829C	$h_{FE}$	100	—	200	
Base to emitter voltage	$V_{BE}$	—	—	1.0	V	$V_{CE} = 10 \text{ V}$ , $I_C = 10 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(\text{sat})}$	—	—	1.0	V	$I_C = 100 \text{ mA}$ , $I_B = 10 \text{ mA}$
Gain bandwidth product	$f_T$	800	1100	—	MHz	$V_{CE} = 10 \text{ V}$ , $I_E = 100 \text{ mA}$
Collector output capacitance	$C_{ob}$	—	4.2	6.0	pF	$V_{CB} = 30 \text{ V}$ , $I_E = 0$ , $f = 1 \text{ MHz}$







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