
2SC4829

Silicon NPN Epitaxial

HITACHI

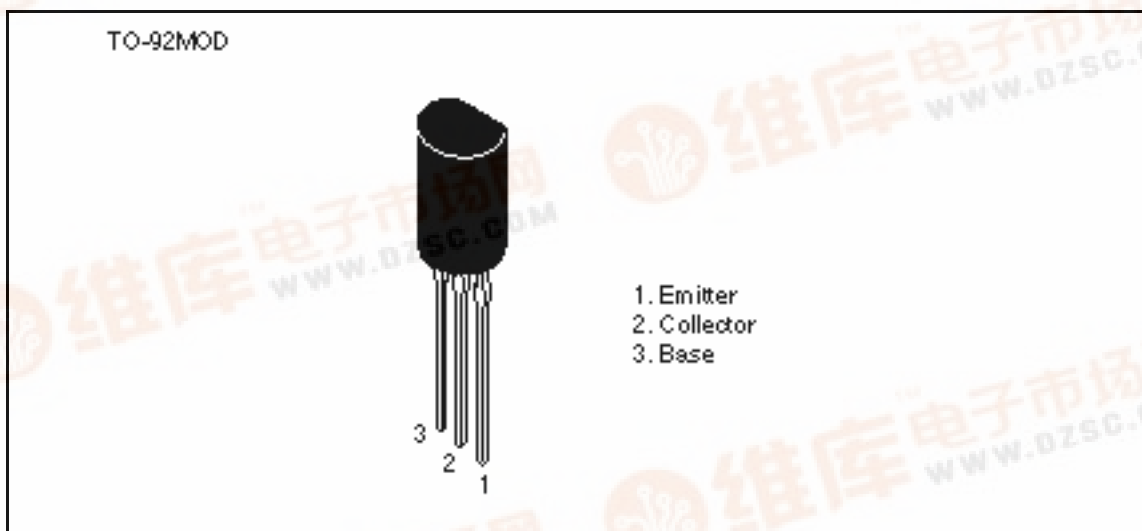
Application

High frequency amplifier

Features

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

Outline



2SC4829

Ordering Information

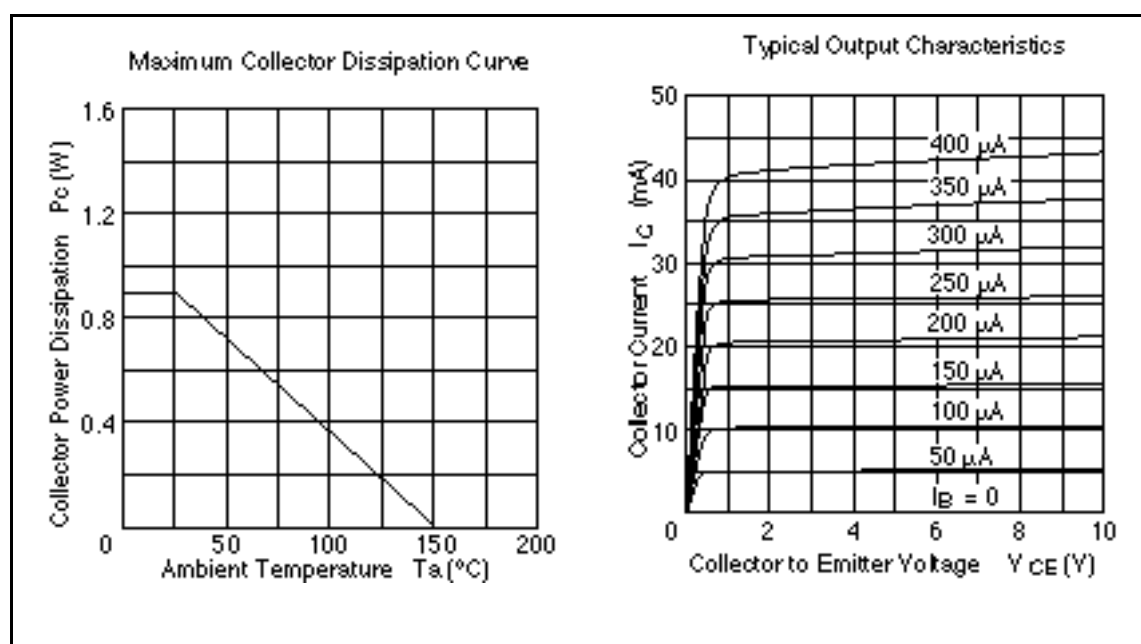
	h_{FE}
2SC4829B	60 to 120
2SC4829C	100 to 200

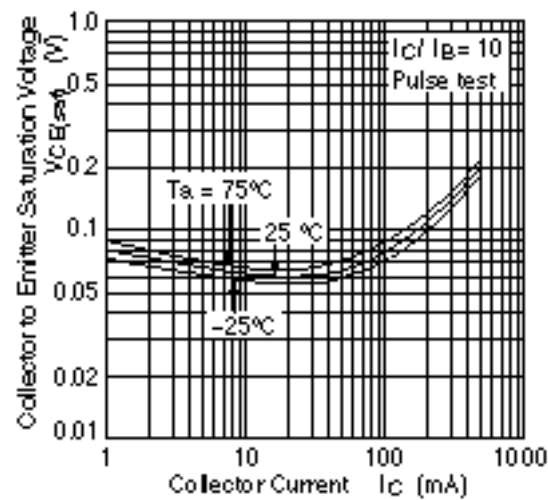
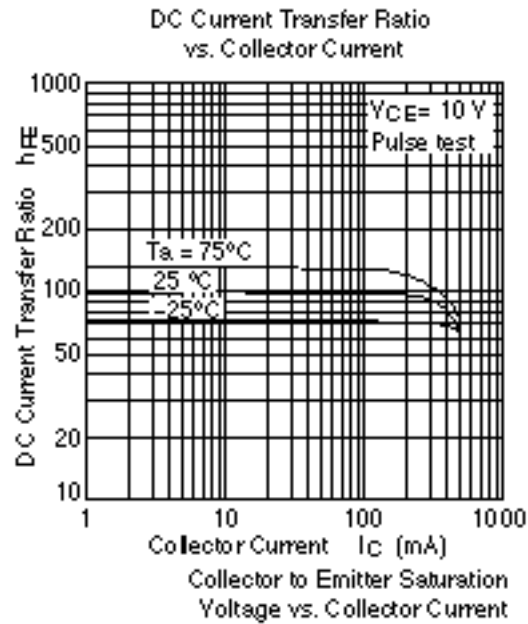
Absolute Maximum Ratings (Ta = 25°C)

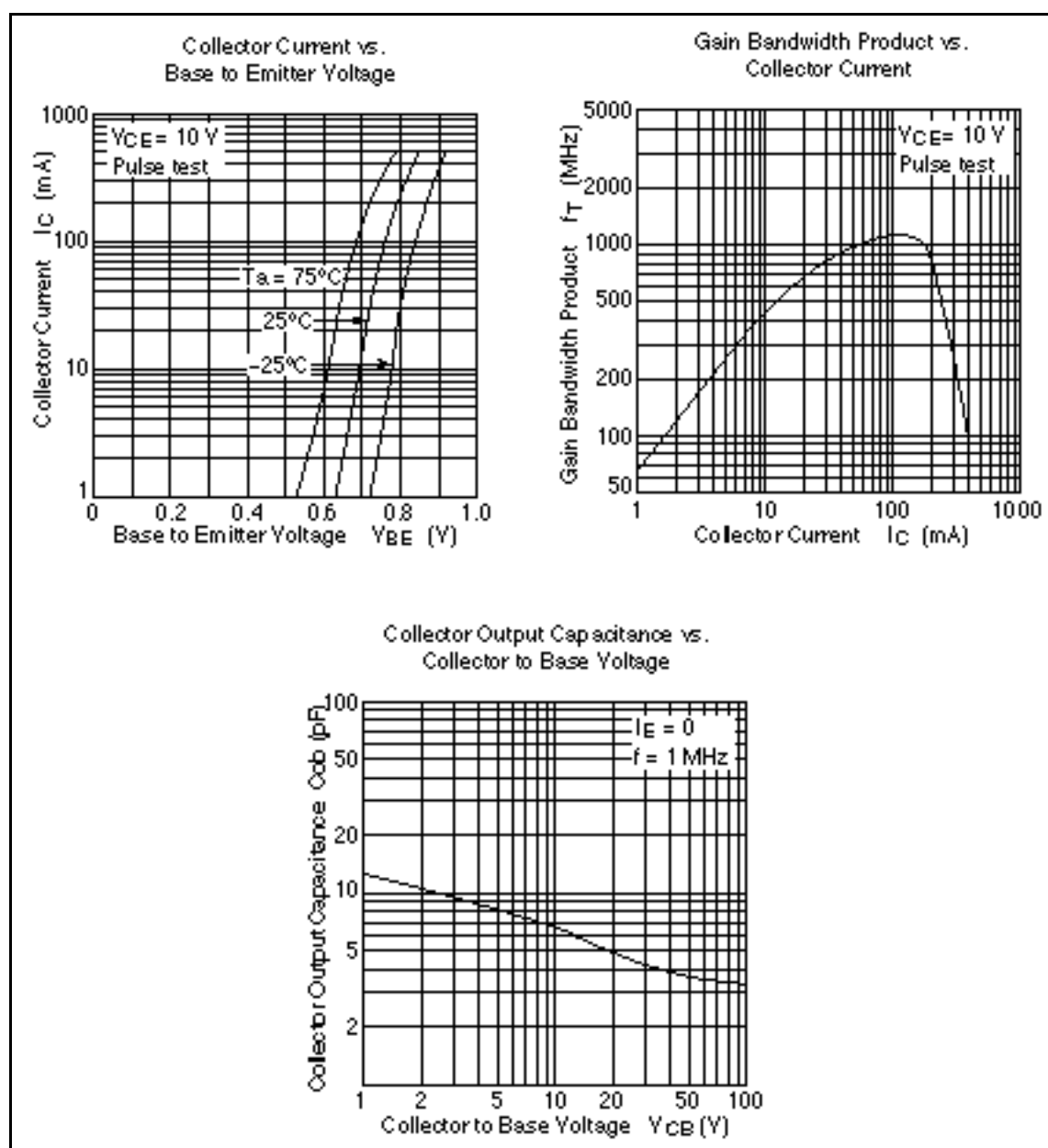
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	100	V
Collector to emitter voltage	V_{CEO}	100	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_C	0.2	A
Collector peak current	$i_{C(peak)}$	0.5	A
Collector power dissipation	P_C	0.9	W
Junction temperature	T_j	150	°C
Storage temperature	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	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	100	—	—	V	$I_C = 1 \text{ mA}, R_{BE} =$
Emitter cutoff current	I_{EBO}	—	—	10	μA	$V_{EB} = 3 \text{ V}, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	1.0	μA	$V_{CB} = 80 \text{ V}, I_E = 0$
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	$V_{CE(sat)}$	—	—	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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