2SC0829 (2SC829)

Silicon NPN epitaxial planar type

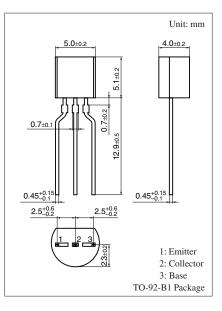
For high-frequency amplification

Features

• Optimum for RF amplification, oscillation, mixing, and IF stage of FM/AM radios

Parameter	Symbol	Rating	Unit			
Collector-base voltage (Emitter open)	V _{CBO}	30	V			
Collector-emitter voltage (Base open)	V _{CEO}	20	V			
Emitter-base voltage (Collector open)	V _{EBO}	5	V			
Collector current	I _C	30	mA			
Collector power dissipation	P _C	400	mW			
Junction temperature	Tj	150	°C			
Storage temperature	T _{stg}	-55 to +150	°C			





Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

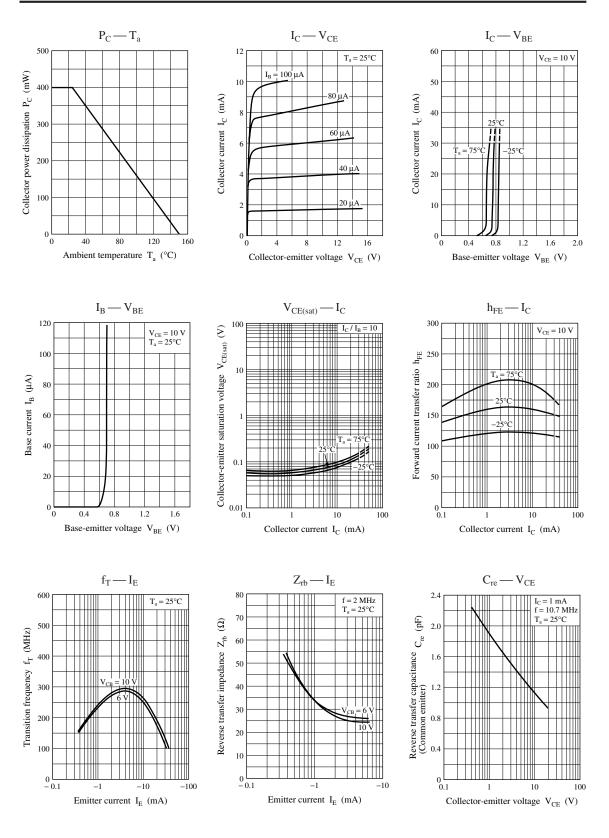
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = 10 \ \mu A, \ I_{\rm E} = 0$	30			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = 2 \text{ mA}, I_{\rm B} = 0$	20			V
Emitter-base voltage (Collector open)	V _{EBO}	$I_E = 10 \ \mu A, \ I_C = 0$	5			V
Forward current transfer ratio *	h _{FE}	$V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}$	70		250	—
Transition frequency	f _T	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 200 \text{ MHz}$	150	230		MHz
Reverse transfer capacitance (Common emitter)	C _{re}	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 10.7 \text{ MHz}$		1.3	1.6	pF
Reverse transfer impedance	Z _{rb}	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 2 \text{ MHz}$			60	Ω

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors. 2. *: Rank classification

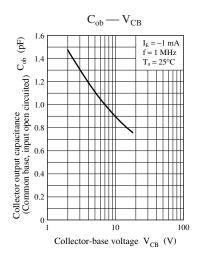
Rank	В	С
h _{FE}	70 to 160	110 to 250

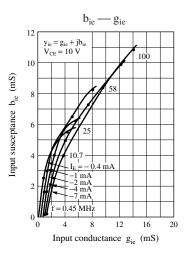
Note) The part number in the parenthesis shows conventional part number.

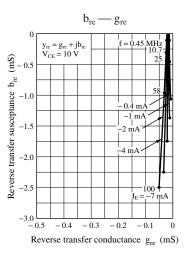
Panasonic

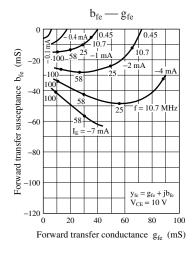


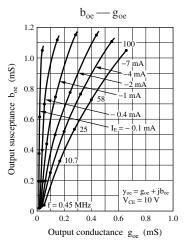
Panasonic











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