2SC2636

Silicon NPN epitaxial planar type

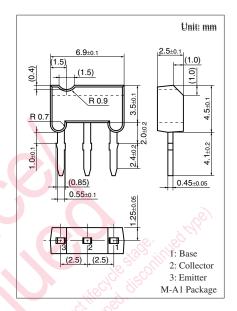
For high-frequency amplification/oscillation

■ Features

- High transition frequency f_T
- M type package allowing easy automatic and manual insertion as well as stand-alone fixing to the printed circuit board

■ Absolute Maximum Ratings $T_a = 25$ °C

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}	3	V	
Collector current	I_C	50	mA	
Collector power dissipation	P _C	400	mW	
Junction temperature	T _j	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C	



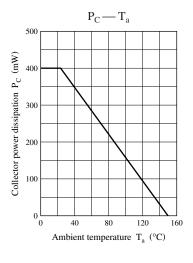
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

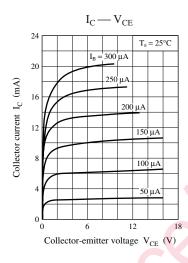
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = 100 \ \mu \text{A}, \ I_{\rm E} = 0$	30			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_{\rm E} = 10 \ \mu A, I_{\rm C} = 0$	3			V
Base-emitter voltage	V_{BE}	$V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}$		720		mV
Forward current transfer ratio *	h _{FE}	$V_{CE} = 10 \text{ V}, I_{C} = 2 \text{ mA}$	25			_
Transition frequency	f_{T}	$V_{CB} = 10 \text{ V}, I_E = -15 \text{ mA}, f = 200 \text{ MHz}$	600	1 200	1600	MHz
Power gain	G_{P}	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 100 \text{ MHz}$		20		dB
Reverse transfer capacitance	C_{rb}	$V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		0.8		pF
(Common base)						
Reverse transfer capacitance (Common emitter)	C _{re}	$V_{CE} = 10 \text{ V}, I_{C} = 1 \text{ mA}, f = 10.7 \text{ MHz}$			1.5	pF
(Common cuntter)						
Collector-base parameter	$r_{bb}' \cdot C_C$	$V_{CB} = 10 \text{ V}, I_E = -10 \text{ mA}, f = 31.9 \text{ MHz}$			25	ps

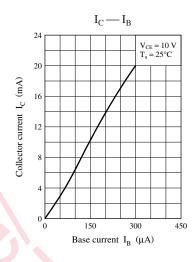
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

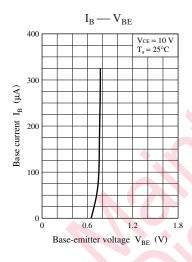
2. *: Rank classification

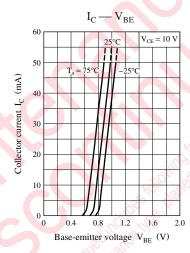
Rank	Т	S
h_{FE}	600 to 1 300	900 to 1 600

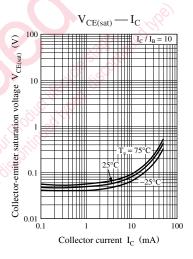


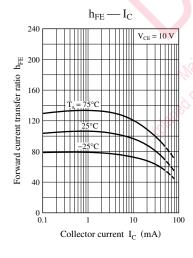


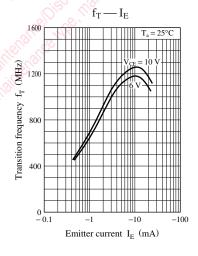


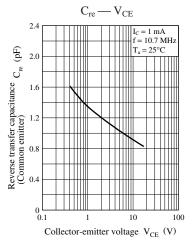


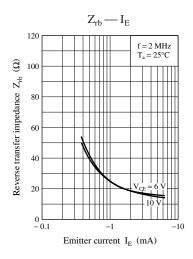


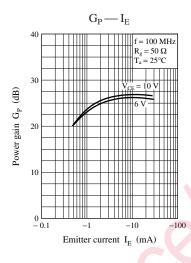


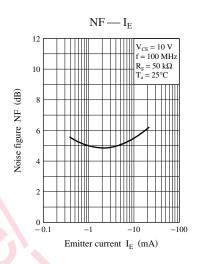


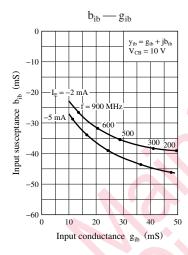


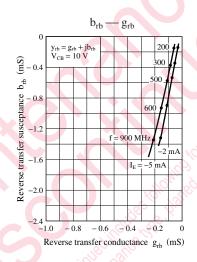


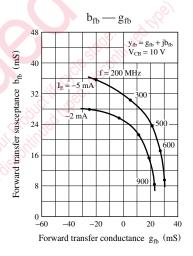


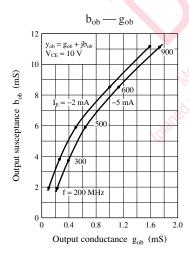












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