Panasonic

2SC3077

Silicon NPN planer type

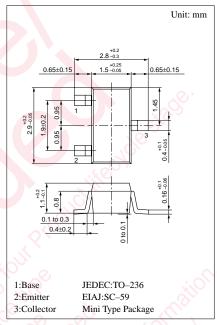
For UHF amplification/mixing

Features

- High power gain PG.
- High transition frequency f_T.
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit	
Collector to base voltage	V_{CBO}	30	V	
Collector to emitter voltage	V_{CEO}	20	V	
Emitter to base voltage	$V_{\rm EBO}$	3	V	
Collector current	$I_{\rm C}$	20	mA	
Collector power dissipation	P _C	150	mW	
Junction temperature	T_{j}	150	°C	
Storage temperature	T_{stg}	−55 ~ +150	C C	



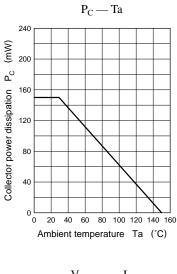
Marking symbol: 1T

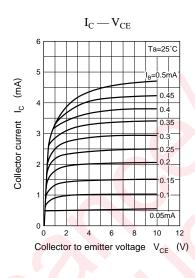
Electrical Characteristics (Ta=25°C)

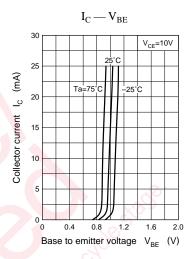
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 25V, I_{E} = 0$	Y 00		1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 3V, I_C = 0$	W. Z		10	μΑ
Forward current transfer ratio	h _{FE1}	$V_{CB} = 10V, I_E = -3mA$	40		200	
	h _{FE2}	$V_{CB} = 10V, I_E = -10mA$	40		200	
Transition frequency	f_T	$V_{CB} = 10V$, $I_E = -3mA$, $f = 200MHz$	750	1100	1400	MHz
Collector output capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		0.7		pF
Common emitter reverse transfer capacitance	C _{rb}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		0.15		pF
Power gain	PG	$V_{CC} = 11V, V_{AGC} = 3V, f = 800MHz$	14			dB
Noise figure	NF	$V_{CC} = 11V, V_{AGC} = 3V, f = 800MHz$			5	dB

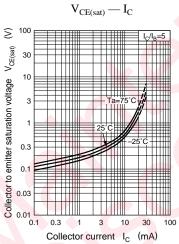
Panasonic

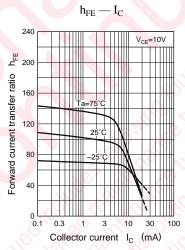
Transistor 2SC3077

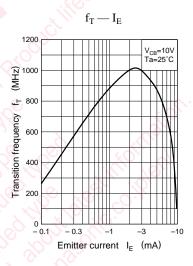


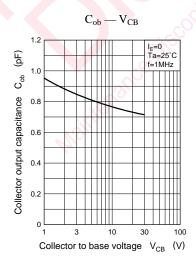


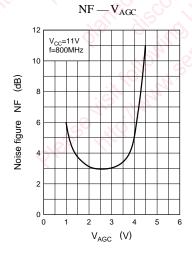


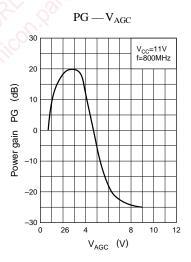












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