Transistor Panasonic

2SC4808

Silicon NPN epitaxial planer type

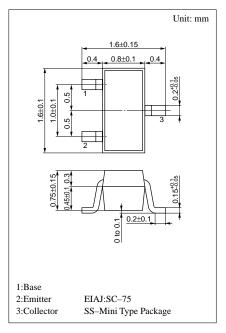
For UHF band low-noise amplification

Features

- Low noise figure NF.
- High gain.
- High transition frequency f_T.
- SSMini type package, allowing downsizing of the equipment and automatic insertion through the tape packing.

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit	
Collector to base voltage	V_{CBO}	15	V	
Collector to emitter voltage	V_{CEO}	10	V	
Emitter to base voltage	V_{EBO}	2	V	
Collector current	I_{C}	80	mA	
Collector power dissipation	P_{C}	125	mW	
Junction temperature	T _j	125	°C	
Storage temperature	T_{stg}	−55 ~ +125	°C	



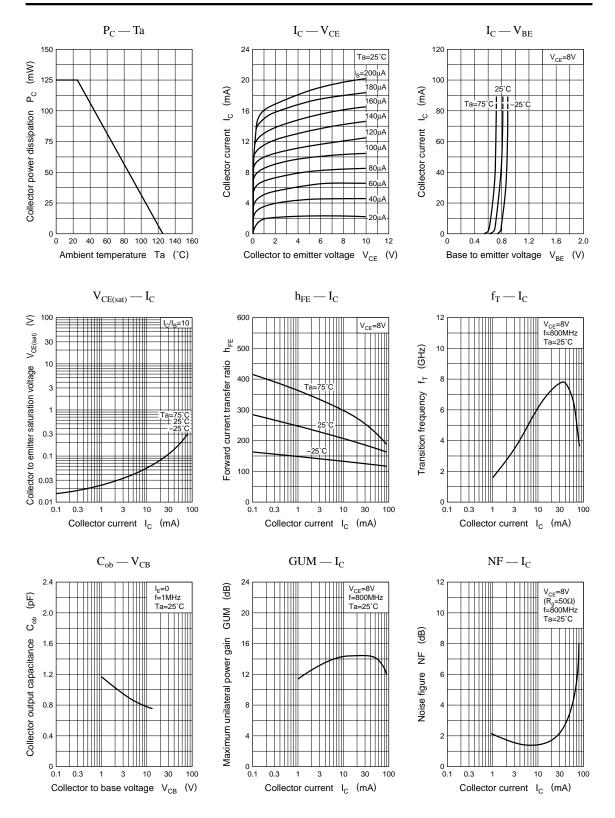
Marking symbol: 3M

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CBO}	$V_{CB} = 10V, I_{E} = 0$			1	μА
Emitter cutoff current	I_{EBO}	$V_{EB} = 2V$, $I_C = 0$			1	μΑ
Collector to base voltage	V _{CBO}	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	15			V
Collector to emitter voltage	V _{CEO}	$I_{\rm C} = 100 \mu A, I_{\rm B} = 0$	10			V
Forward current transfer ratio	h _{FE}	$V_{CE} = 8V, I_{C} = 20mA^{*}$	50	150	300	
Transition frequency	f_T	$V_{CE} = 8V, I_{C} = 15mA, f = 800MHz$	5	6		GHz
Collector output capacitance	Cob	$V_{CB} = 10V, I_E = 0, f = 1MHz$		0.7	1.2	pF
Foward transfer gain	$ S_{21e} ^2$	$V_{CE} = 8V, I_{C} = 15mA, f = 800MHz$	11	14		dB
Maximum unilateral power gain	GUM	$V_{CE} = 8V, I_{C} = 15mA, f = 800MHz$		15		dB
Noise figure	NF	$V_{CE} = 8V, I_{C} = 7mA, f = 800MHz$			2	dB

^{*} Pulse measurement

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