2SC4835

Silicon NPN epitaxial planer type

For UHF band low-noise amplification

Features

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

Symbol	Ratings	Unit
V _{CBO}	15	V
V _{CEO}	10	V
V _{EBO}	2	V
I _C	80	mA
P _C	150	mW
Tj	150	°C
T _{stg}	-55 ~ +150	°C
	V_{CBO} V_{CEO} V_{EBO} I_{C} P_{C} T_{j}	$\begin{tabular}{ c c c c c } \hline V_{CBO} & 15 \\ \hline V_{CEO} & 10 \\ \hline V_{EBO} & 2 \\ \hline I_C & 80 \\ \hline P_C & 150 \\ \hline T_j & 150 \\ \hline \end{tabular}$

Unit: mm 0.15+0.10 0.3+0.1 425) 3 1.25 ± 0.10 2.1±0.1 H1. 2 (0.65) (0.65) 0.2±0.1 1.3±0.1 2.0±0.2 0.9±0.0 0.9+0 0 to 0.1 1:Base 2:Emitter EIAJ:SC-70 3:Collector SMini3-G1 Package

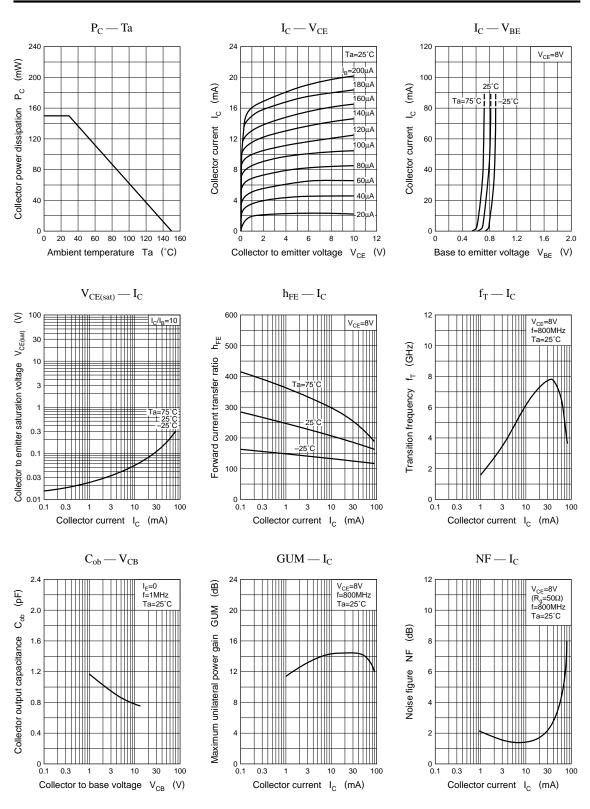
Marking symbol : 3M

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CBO}	$V_{CB} = 10V, I_E = 0$			1	μA
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	200	
Transition frequency	f _T	$V_{CE} = 8V, I_C = 15mA, f = 800MHz$	5	6		GHz
Collector output capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		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	$V_{CE} = 8V, I_C = 7mA, f = 800MHz$		1.3	2	dB

Electrical Characteristics (Ta=25°C)

Absolute Maximum Ratings (Ta=25°C)

* Pulse measurement



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