Transistors

2SA2122

Silicon PNP epitaxial planar type

For general amplification Complementary to 2SC5950

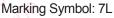
Features

- \bullet High forward current transfer ratio $h_{F\!E}$
- Smini typ package, allowing downsizing of the equipment and automatic insertion through the tape packing

Unit: mm 0.425) $0.15\substack{+0.10 \\ -0.05}$ 0.3+0.1 3 1.25±0.10 2.1±0.1 2 1 (0.65) (0.65) 0.2±0. 1.3±0.1 2.0±0.2 10 0.9±0.1 0.9^{+0.2} 0 to 0.1 1: Base 2: Emitter 3: Collector SMini3-G1 Package

Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	-60	V	
Collector-emitter voltage (Base open)	V _{CEO}	-50	V	
Emitter-base voltage (Collector open)	V _{EBO}	-7	V	
Collector current	I _C	-100	mA	
Peak collector current	I _{CP}	-200	mA	
Collector power dissipation	P _C	150	mW	
Junction temperature	T _j	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}	$I_{\rm C} = -10 \ \mu A, I_{\rm E} = 0$	-60			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-50	0/		V
Emitter-base voltage (Collector open)	V _{EBO}	$I_{\rm E} = -10 \ \mu A, I_{\rm C} = 0$	-7	9		V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = -20 \text{ V}, I_{E} = 0$	20		- 0.1	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = -10 V, I_B = 0$			-100	μΑ
Forward current transfer ratio	\mathbf{h}_{FE}	$V_{CE} = -10 \text{ V}, I_C = -2 \text{ mA}$	160		460	
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -100 \text{ mA}, I_{\rm B} = -10 \text{ mA}$		-0.2	- 0.5	V
Transition frequency	f_{T}	$V_{CB} = -10 \text{ V}, I_{E} = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Collector output capacitance (Common base, input open circuited)	C _{ob}	$V_{CB} = -10 \text{ V}, I_{H} = 0, f = 1 \text{ MHz}$		2.2		pF

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

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