2SA1531, 2SA1531A

Silicon PNP epitaxial planar type

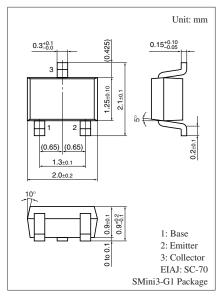
For low-frequency and low-noise amplification Complementary to 2SC3929 and 2SC3929A

■ Features

- Low noise voltage NV
- High forward current transfer ratio hFE
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage	2SA1531	V_{CBO}	-35	V
(Emitter open)	2SA1531A		-55	
Collector-emitter voltage	2SA1531	V _{CEO}	-35	V
(Base open)	2SA1531A		-55	
Emitter-base voltage (Col	V_{EBO}	-5	V	
Collector current	I_C	-50	mA	
Peak collector current	I_{CP}	-100	mA	
Collector power dissipation	P _C	150	mW	
Junction temperature	T_{j}	150	°C	
Storage temperature	T_{stg}	-55 to +150	°C	



Marking Symbol:

• 2SA1531: F

• 2SA1531A: H

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

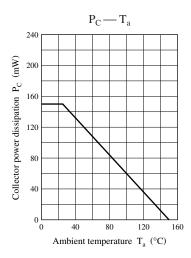
Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage	2SA1531	V _{CBO}	$I_{\rm C} = -10 \; \mu \text{A}, \; I_{\rm E} = 0$	-35			V
(Emitter open)	2SA1531A			-55			
Collector-emitter voltage	2SA1531	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-35			V
(Base open)	2SA1531A			-55			
Emitter-base voltage (Collector open)		V _{EBO}	$I_E = -10 \ \mu A, I_C = 0$	-5			V
Base-emitter voltage		V_{BE}	$V_{CE} = -1 \text{ V}, I_{C} = -100 \text{ mA}$		- 0.7	-1.0	V
Collector-base cutoff current (Emitter open)		I_{CBO}	$V_{CB} = -10 \text{ V}, I_E = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)		I_{CEO}	$V_{CE} = -10 \text{ V}, I_B = 0$			-1	μΑ
Forward current transfer ratio *		h _{FE}	$V_{CE} = -5 \text{ V}, I_{C} = -2 \text{ mA}$	180		700	_
Collector-emitter saturation voltage		V _{CE(sat)}	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$			- 0.6	V
Transition frequency		f_T	$V_{CB} = -5 \text{ V}, I_E = 2 \text{ mA}, f = 200 \text{ MHz}$		150		MHz
Noise voltage		NV	$V_{CE} = -10 \text{ V}, I_{C} = -1 \text{ mA}, G_{V} = 80 \text{ dB}$ $R_{g} = 100 \text{ k}\Omega, \text{ Function} = \text{FLAT}$			150	mV

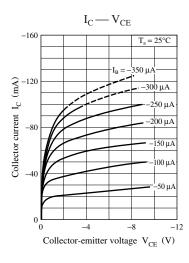
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

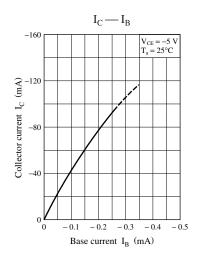
2. *: Rank classification

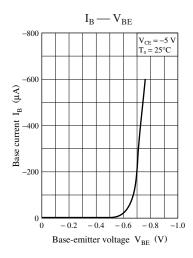
Rank	R	S	Т	
h_{FE}	180 to 360	260 to 520	360 to 700	

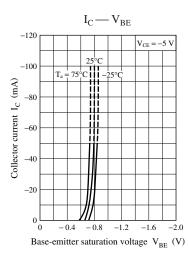
Panasonic

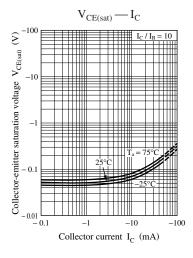


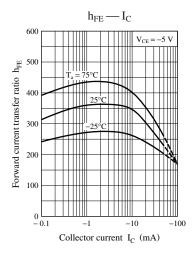


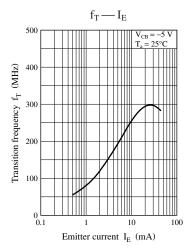


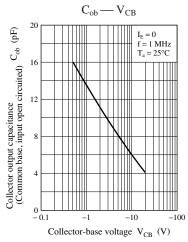


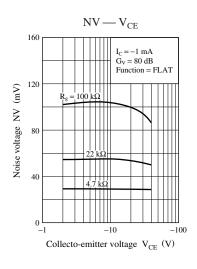


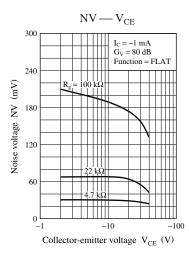


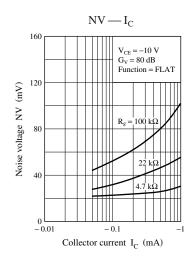


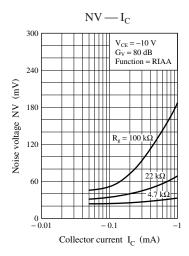


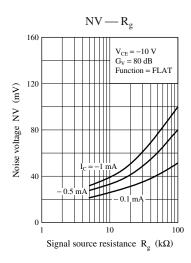


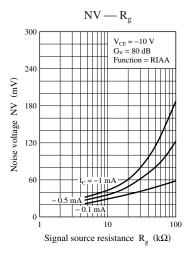












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