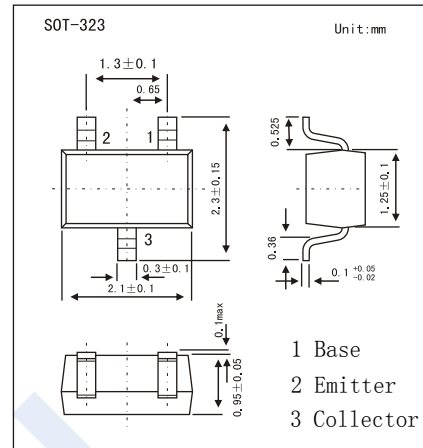


PNP Transistors

2SA1531A

■ Features

- Low noise voltage NV.
- High forward current transfer ratio h_{FE} .
- Complementary to 2SC3929A



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-55	V
Collector - Emitter Voltage	V_{CEO}	-55	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-50	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100 \mu\text{A}, I_E = 0$	-55			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -2 \text{ mA}, I_B = 0$	-55			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -50 \text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$			-0.6	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$			-1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$		-0.7	-1	
DC current gain	h_{FE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	180		700	
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
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_E = 2 \text{ mA}, f = 200\text{MHz}$		80		MHz

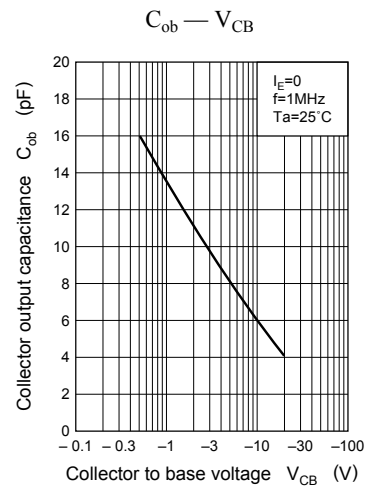
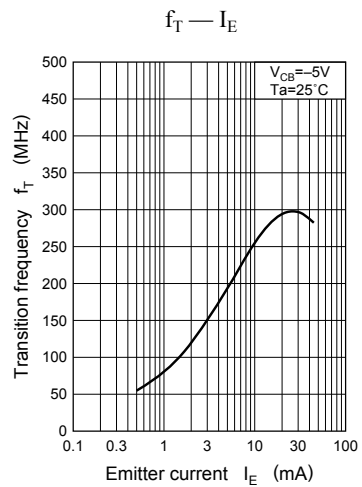
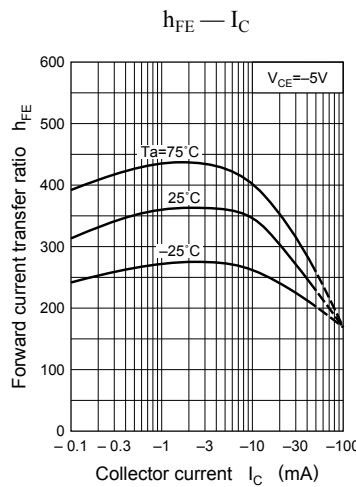
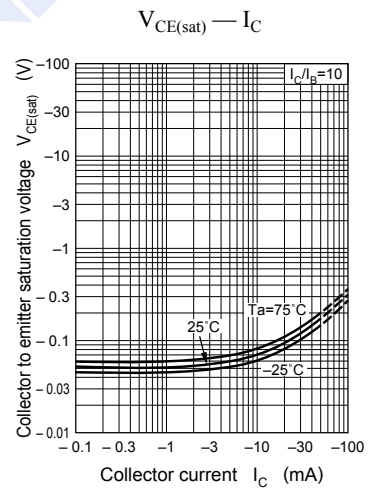
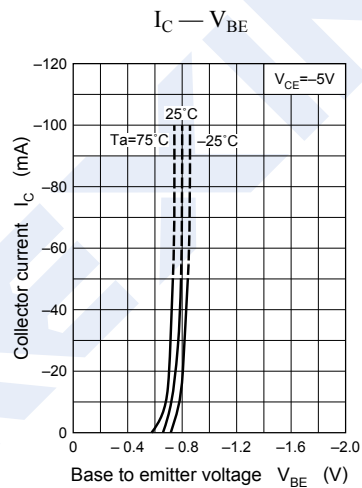
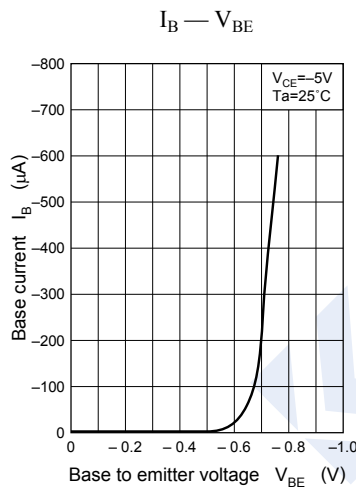
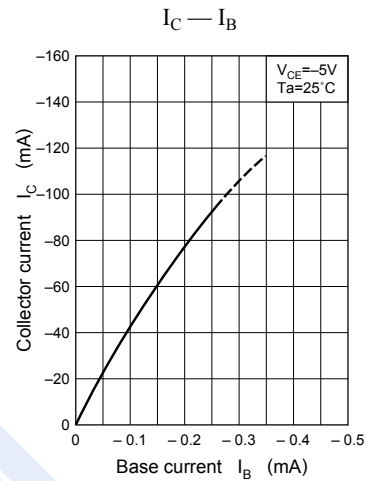
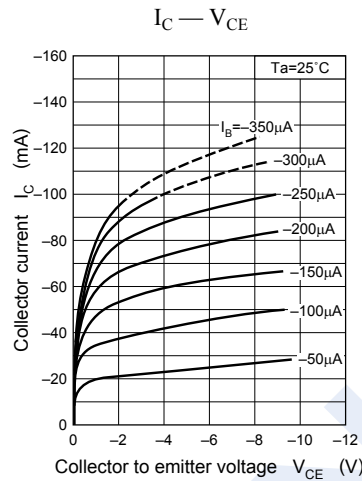
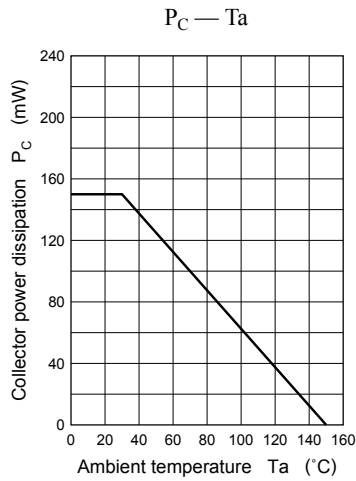
■ Classification of h_{FE}

Type	2SA1531A-R	2SA1531A-S	2SA1531A-T
Range	180-360	260-520	360-700
Marking	HR	HS	HT

PNP Transistors

2SA1531A

Typical Characteristics



PNP Transistors

2SA1531A

■ Typical Characteristics

