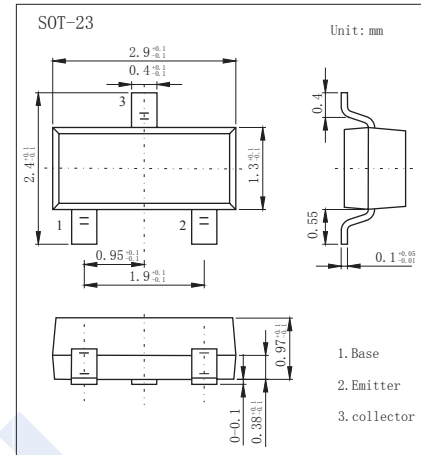


PNP Transistors

KTA1504S

■ Features

- Excellent hFE Linearity
: $h_{FE}(0.1\text{mA}) / h_{FE}(2\text{mA}) = 0.95(\text{Typ.})$.
- Low Noise : NF=1dB(Typ.), 10dB(Max.).
- Complementary to KTC3875S.



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-50	V
Collector - Emitter Voltage	V_{CE0}	-50	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_C	-150	mA
Base Current	I_B	-30	
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_{CB0}	$I_C = -100 \mu\text{A}, I_E = 0$	-50			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{mA}, I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -50 \text{V}, I_E = 0$			-100	nA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5 \text{V}, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 \text{mA}, I_B = -10 \text{mA}$			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 \text{mA}, I_B = -10 \text{mA}$			-1.2	
DC current gain	hFE	$V_{CE} = -6 \text{V}, I_C = -2 \text{mA}$	70		400	
Noise Figure	NF	$V_{CE} = -6 \text{V}, I_C = -0.1 \text{mA}$ $f = 1 \text{kHz}, R_g = 10 \text{k}\Omega$			10	dB
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{V}, I_E = 0, f = 1 \text{MHz}$			7	pF
Transition frequency	f_T	$V_{CE} = -10 \text{V}, I_C = -1 \text{mA}$	80			MHz

■ Classification of hfe

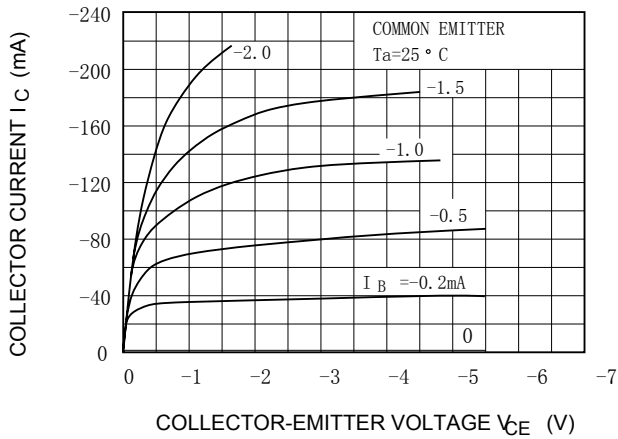
Type	KTA1504S-O	KTA1504S-Y	KTA1504S-G
Range	70-140	120-240	200-400
Marking	ASO	ASY	ASG

PNP Transistors

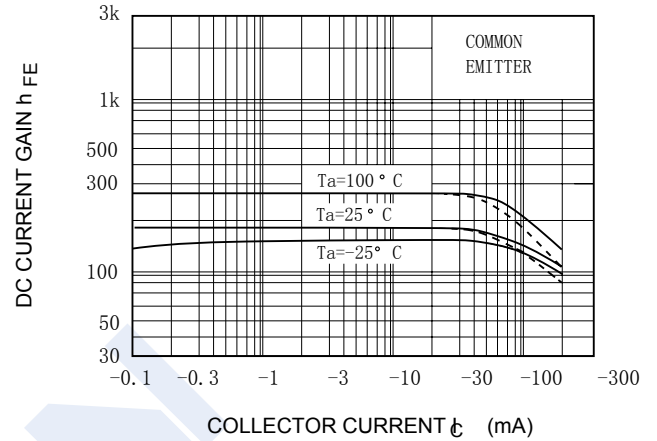
KTA1504S

Typical Characteristics

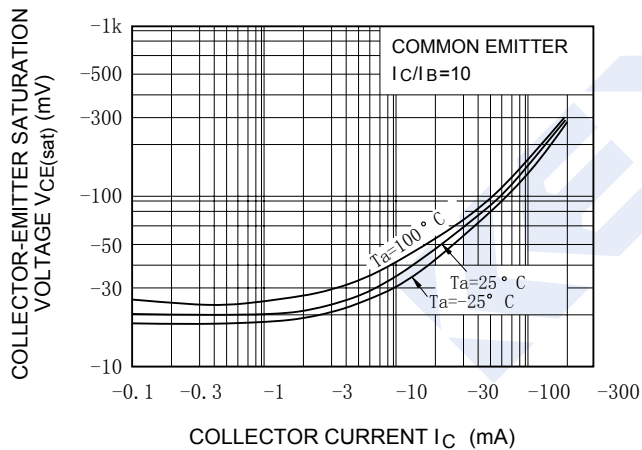
$I_C - V_{CE}$



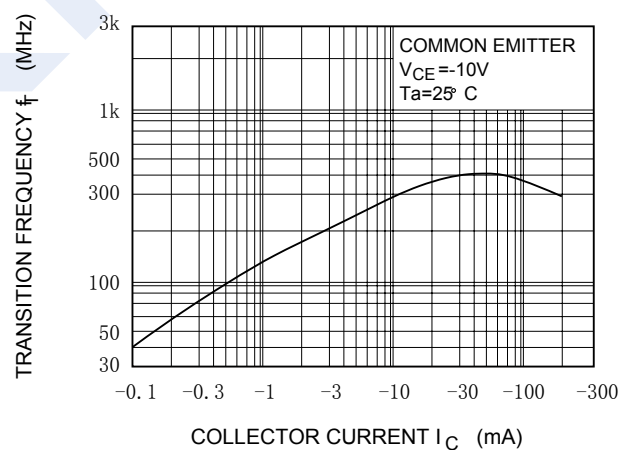
$h_{FE} - I_C$



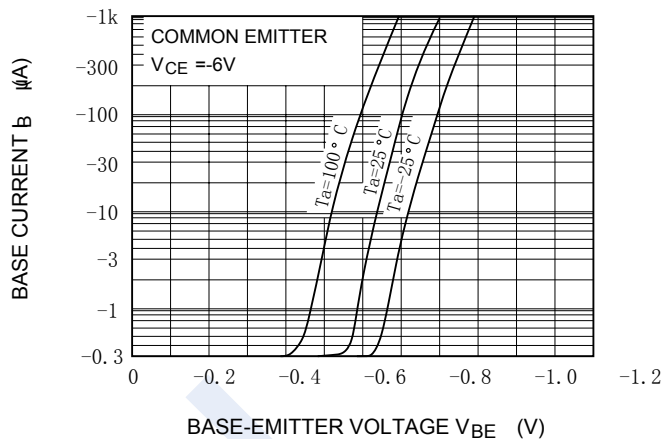
$V_{CE(sat)} - I_C$



$f_T - I_C$



$I_B - V_{BE}$



$P_c - T_a$

