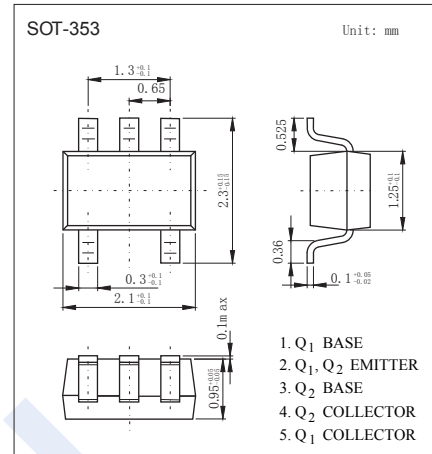
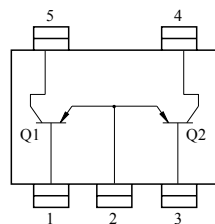


## PNP Transistors

## KTA501U

## ■ Features

- Excellent temperature response between these 2 transistor.
- High pairing property in hFE.
- The following characteristics are common for Q1, Q2.

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CBO}$	-50	V
Collector - Emitter Voltage	$V_{CEO}$	-50	
Emitter - Base Voltage	$V_{EBO}$	-5	
Collector Current - Continuous	$I_C$	-150	mA
Base Current	$I_B$	-30	
Collector Power Dissipation	$P_C$	200	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	$V_{CBO}$	$I_C = -100 \mu\text{A}$ , $I_E = 0$	-50			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C = -1 \text{ mA}$ , $I_B = 0$	-50			
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	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 \text{ V}$ , $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 \text{ mA}$ , $I_B = -10 \text{ mA}$			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 \text{ mA}$ , $I_B = -10 \text{ mA}$			-1.2	
DC current gain	hFE	$V_{CE} = -6 \text{ V}$ , $I_C = -2 \text{ mA}$	120		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

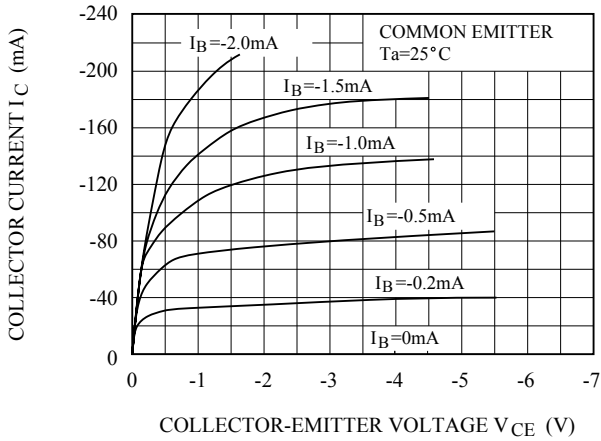
Type	KTA501U-Y	KTA501U-G
Range	120-240	200-400
Marking	SY	SG

# PNP Transistors

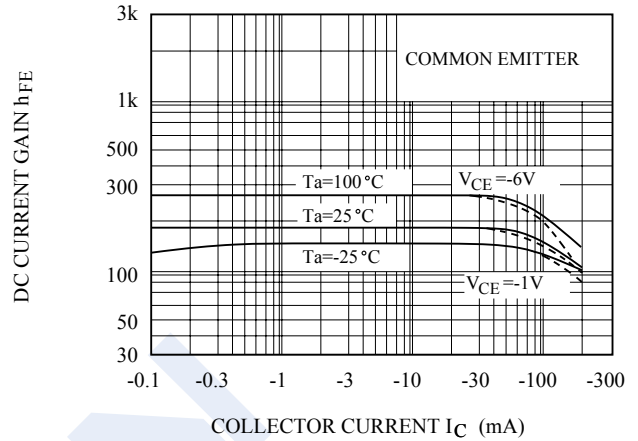
## KTA501U

### Typical Characteristics

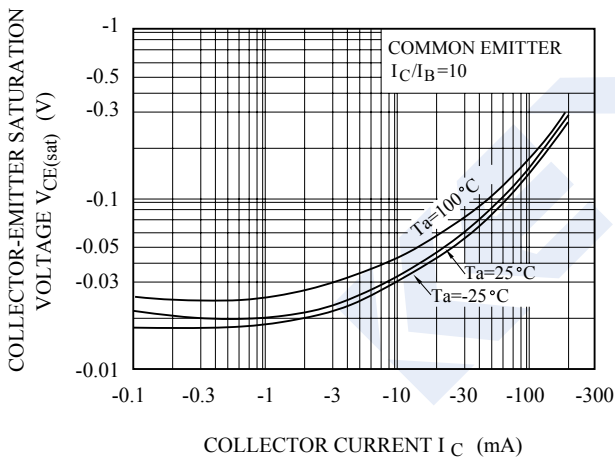
$I_C - V_{CE}$



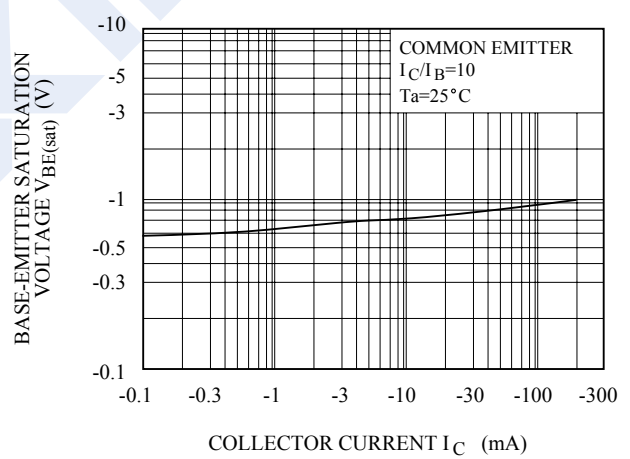
$h_{FE} - I_C$



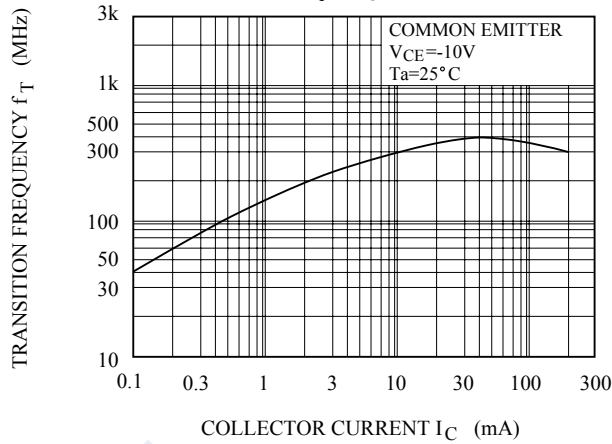
$V_{CE(sat)} - I_C$



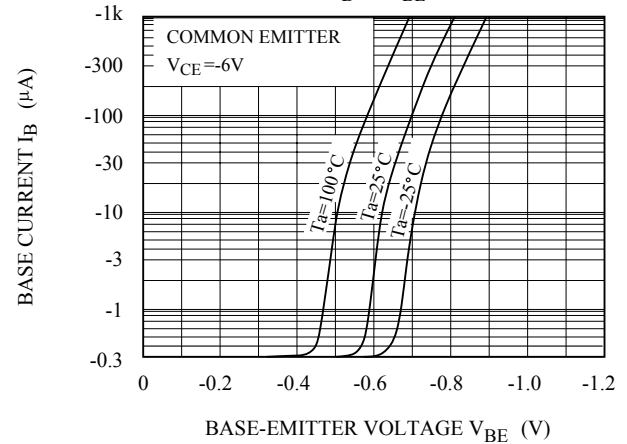
$V_{BE(sat)} - I_C$



$f_T - I_C$



$I_B - V_{BE}$



## PNP Transistors

## KTA501U

## ■ Typical Characteristics

