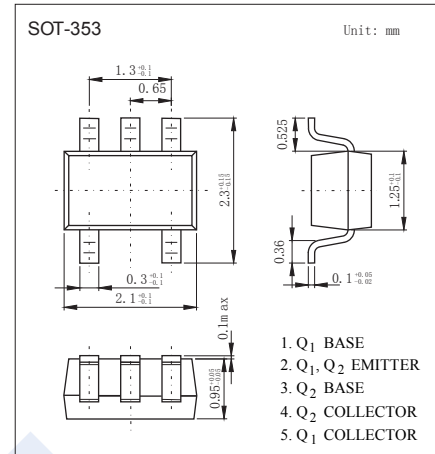
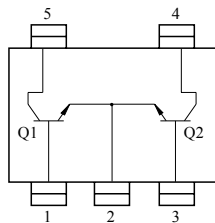


NPN Transistors

KTC601U

■ Features

- Excellent temperature response between these 2 transistor.
- High pairing property in h_{FE} .
- 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}	60	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}	$I_C = 100 \mu\text{A}, I_E = 0$	60			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}	$V_{CB} = 60 \text{ V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5 \text{ V}, I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			1.2	
DC current gain	h_{FE}	$V_{CE} = 6 \text{ V}, I_C = 2 \text{ mA}$	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}	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			3.5	pF
Transition frequency	f_T	$V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}$	80			MHz

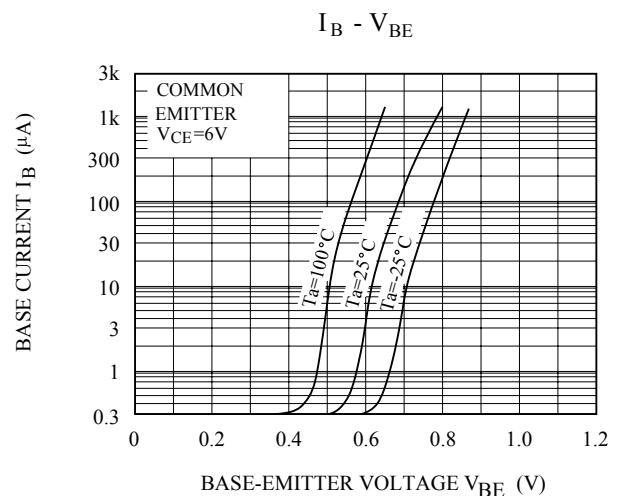
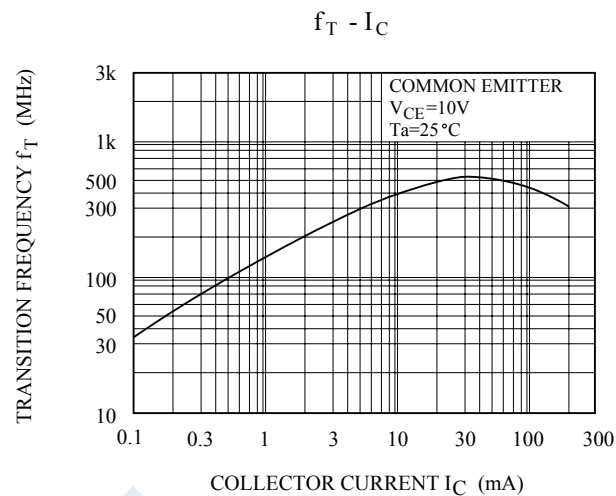
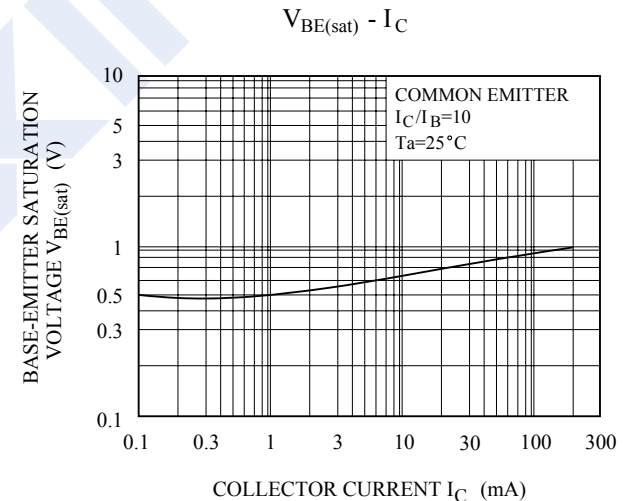
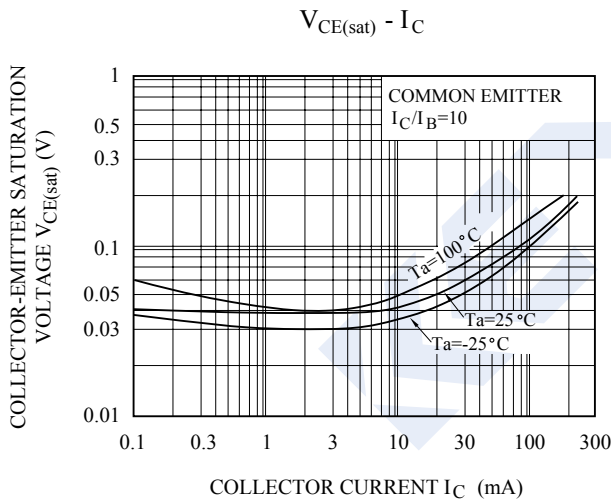
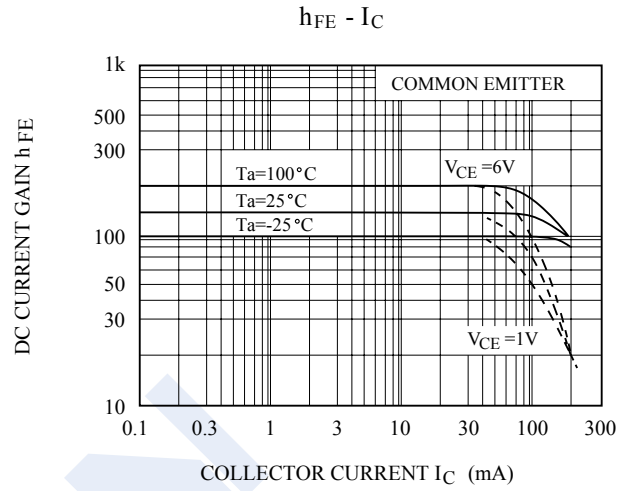
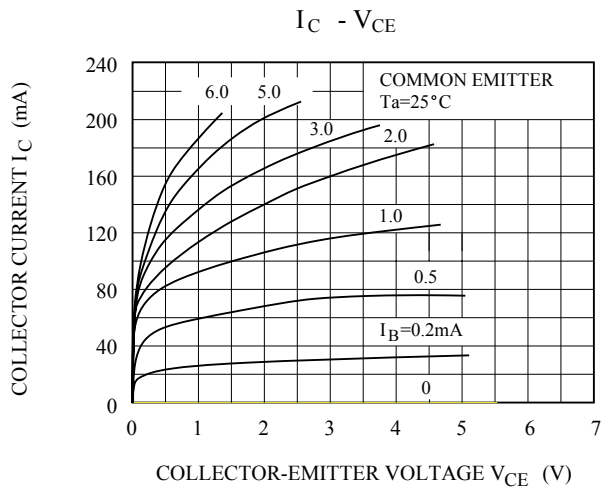
■ Classification of h_{FE}

Type	KTC601U-Y	KTC601U-G
Range	120-240	200-400
Marking	LY	LG

NPN Transistors

KTC601U

■ Typical Characteristics



NPN Transistors

KTC601U

■ Typical Characteristics

