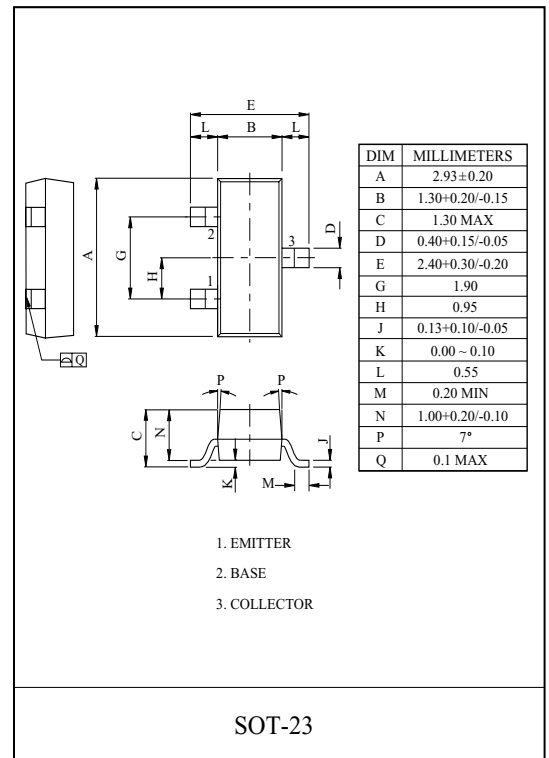
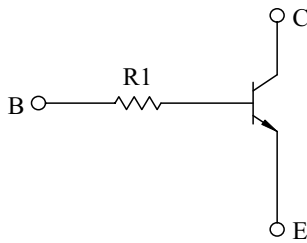


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.

EQUIVALENT CIRCUIT



MAXIMUM RATING (Ta=25)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

ELECTRICAL CHARACTERISTICS (Ta=25)

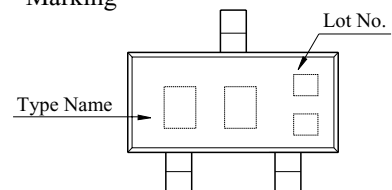
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	I_{CBO}	$V_{CB}=50V, I_E=0$	-	-	100	nA	
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	100	nA	
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=1mA$	120	-	-		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$	-	0.1	0.3	V	
Transition Frequency	f_T^*	$V_{CE}=10V, I_C=5mA$	-	250	-	MHz	
Input Resistor	KRC110S	R_1		3.29	4.7	6.11	k
	KRC111S			7	10	13	
	KRC112S			70	100	130	
	KRC113S			15.4	22	28.6	
	KRC114S			32.9	47	61.1	

Note : * Characteristic of Transistor Only.

MARK SPEC

TYPE	KRC110S	KRC111S	KRC112S	KRC113S	KRC114S
MARK	NK	NM	NN	NO	NP

Marking



KRC110S~KRC114S

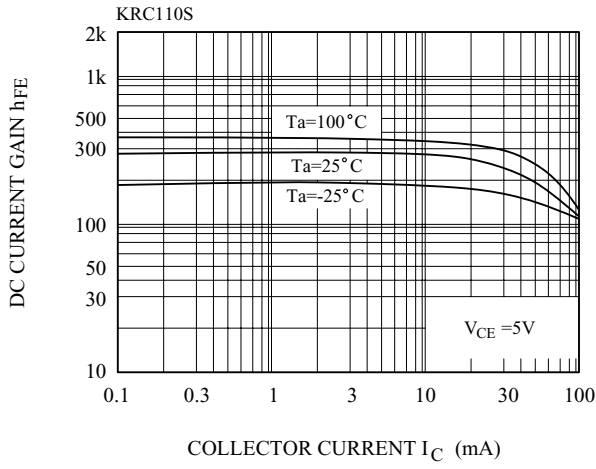
ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Switching Time	Rise Time	KRC110S	V _O =5V V _{IN} =5V R _L =1k	-	0.025	-	μs	
		KRC111S		-	0.03	-		
		KRC112S		-	0.3	-		
		KRC113S		-	0.06	-		
		KRC114S		-	0.11	-		
	Storage Time	KRC110S		t _{stg}	-	3.0		-
		KRC111S			-	2.0		-
		KRC112S			-	6.0		-
		KRC113S			-	4.0		-
		KRC114S			-	5.0		-
	Fall Time	KRC110S		t _f	-	0.2		-
		KRC111S			-	0.12		-
		KRC112S			-	2.0		-
		KRC113S			-	0.9		-
		KRC114S			-	1.4		-

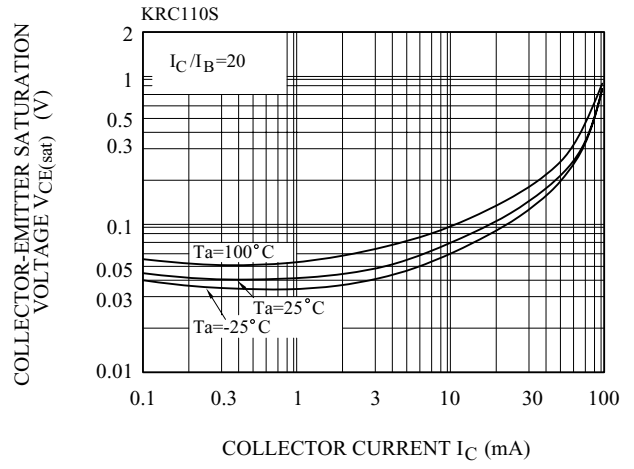
Not recommended
for new design

KRC110S~KRC114S

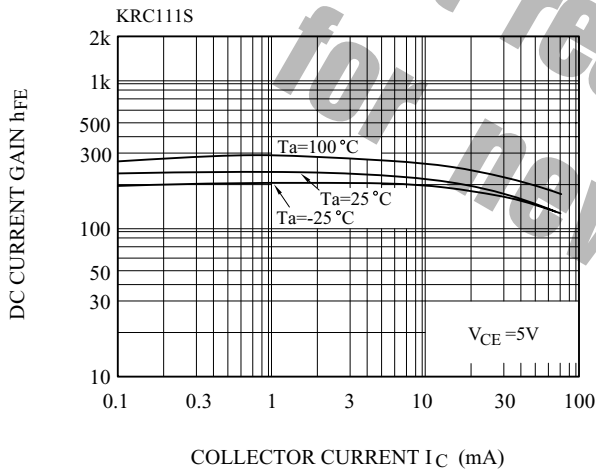
$h_{FE} - I_C$



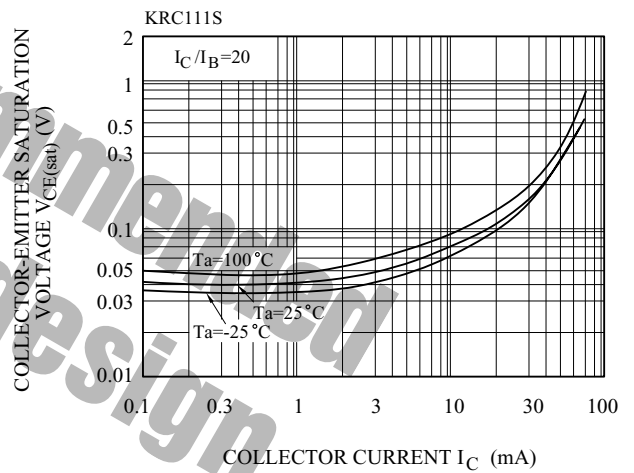
$V_{CE(sat)} - I_C$



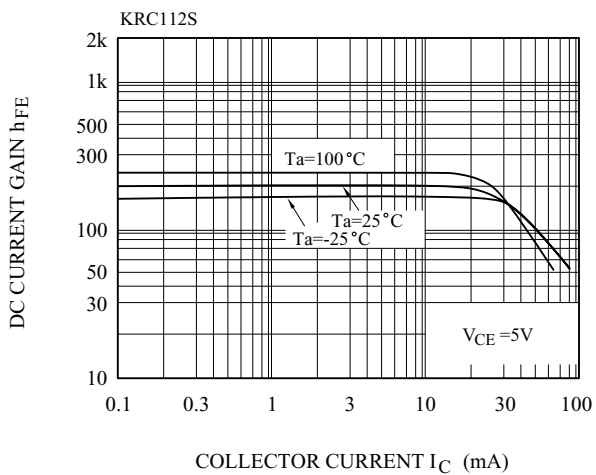
$h_{FE} - I_C$



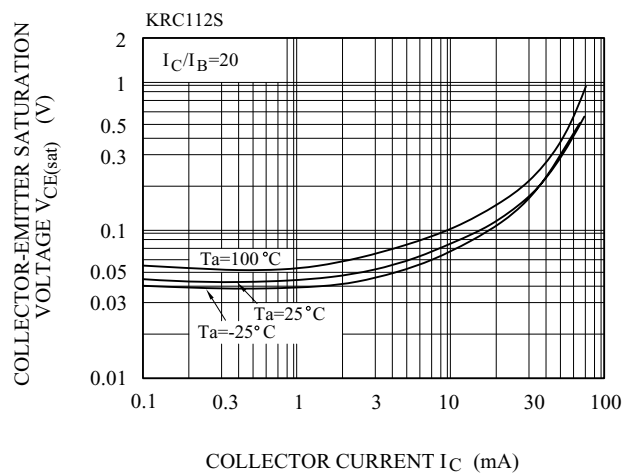
$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



KRC110S~KRC114S

