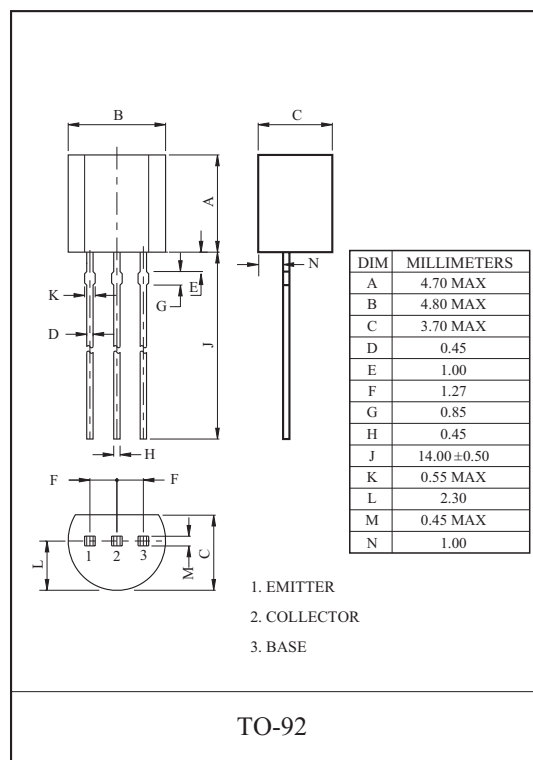
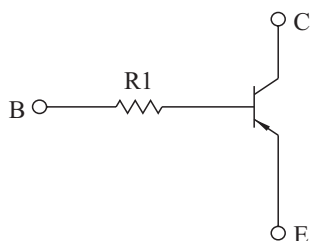


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

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

EQUIVALENT CIRCUIT



MAXIMUM RATING (Ta=25 °C)

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
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

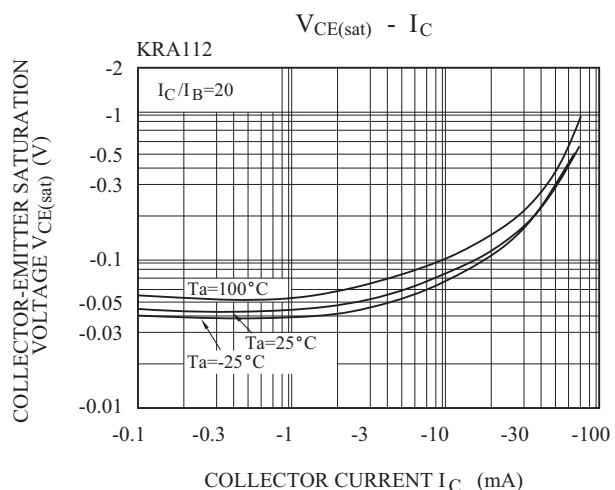
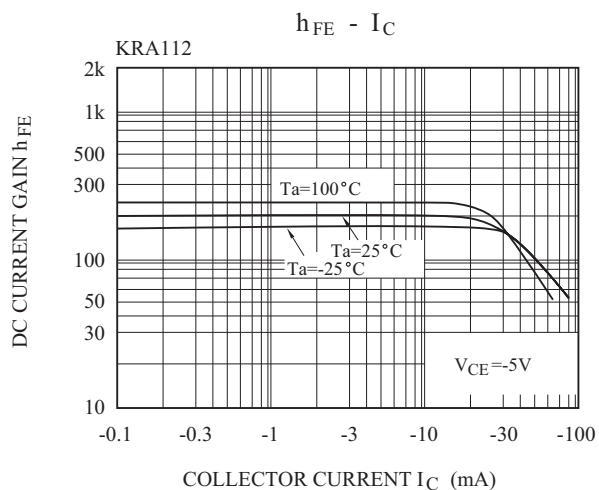
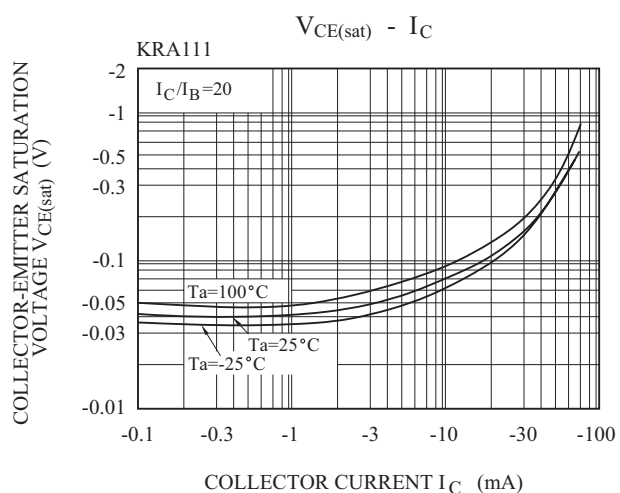
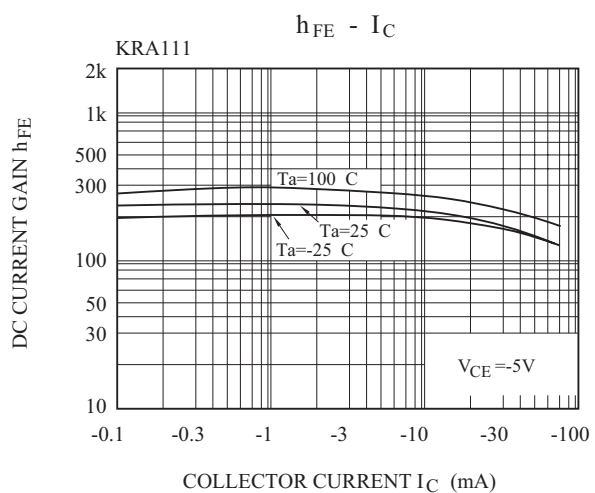
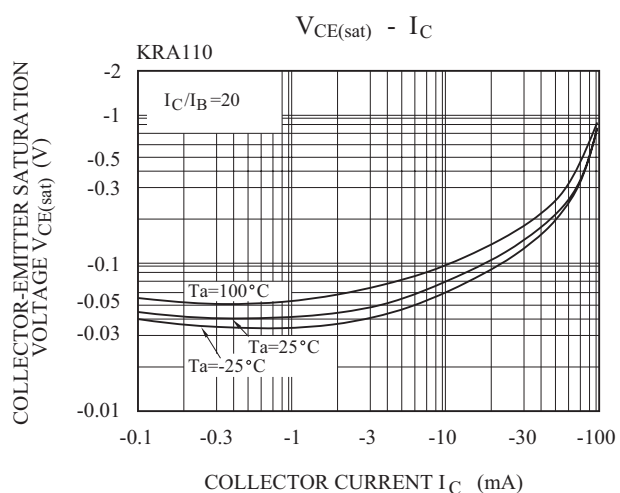
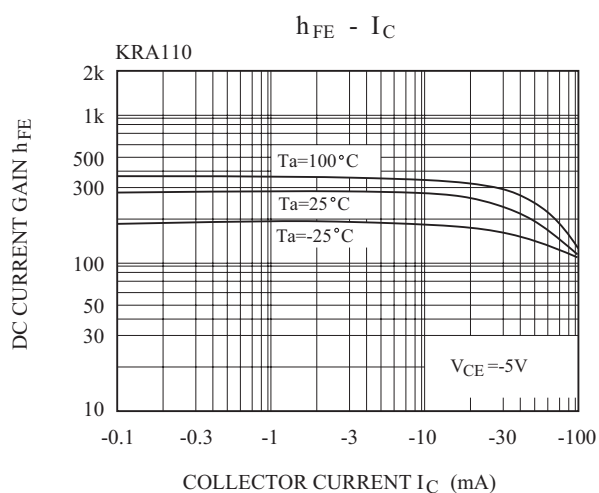
KRA110~KRA114

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
Switching Time	Rise Time	KRA110	t _r	V _O =-5V V _{IN} =-5V R _L =1kΩ	-	0.2	-	μs
		KRA111			-	0.065	-	
		KRA112			-	0.4	-	
		KRA113			-	0.1	-	
		KRA114			-	0.15	-	
	Storage Time	KRA110	t _{stg}		-	2.0	-	
		KRA111			-	1.7	-	
		KRA112			-	3.0	-	
		KRA113			-	2.0	-	
		KRA114			-	1.5	-	
	Fall Time	KRA110	t _f		-	0.3	-	
		KRA111			-	0.3	-	
		KRA112			-	1.7	-	
		KRA113			-	0.8	-	
		KRA114			-	1.5	-	
Input Resistor		KRA110	R1	-	3.29	4.7	6.11	kΩ
		KRA111			7	10	13	
		KRA112			70	100	130	
		KRA113			15.4	22	28.6	
		KRA114			32.9	47	61.1	

Note : * Characteristic of Transistor Only.

KRA110~KRA114



KRA110~KRA114

