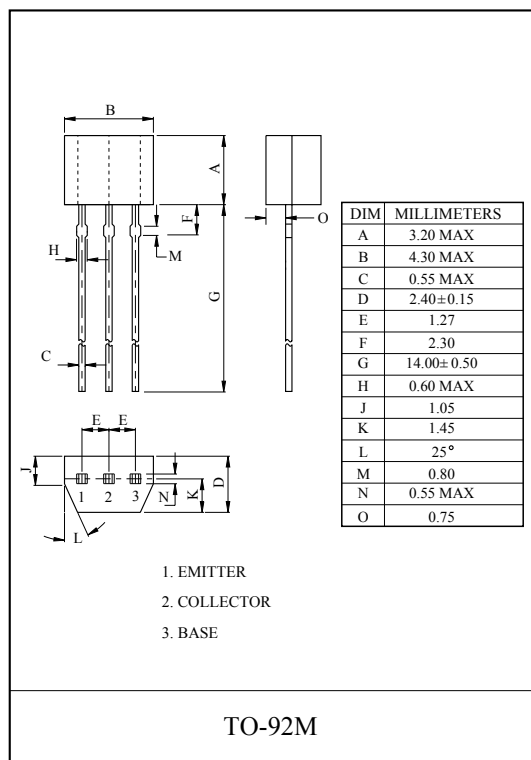
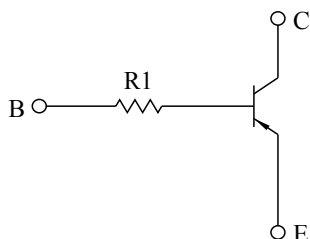


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

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
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 ~ 150	℃

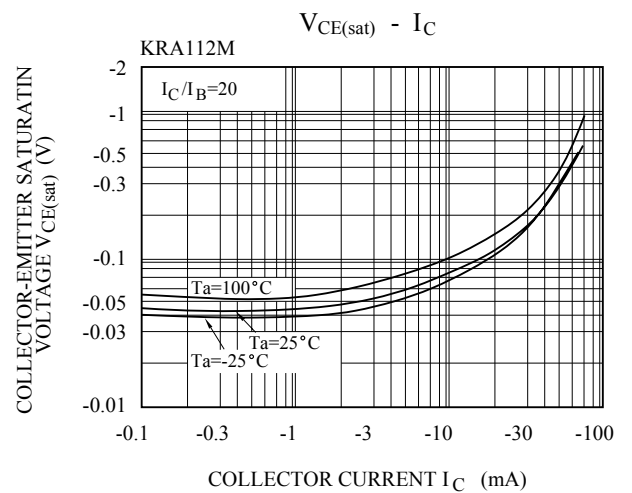
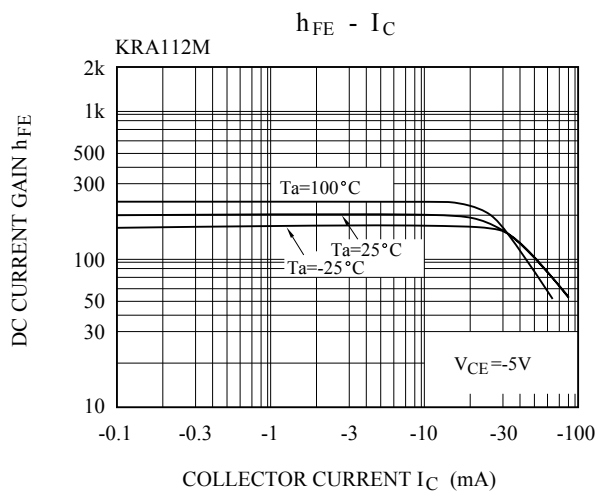
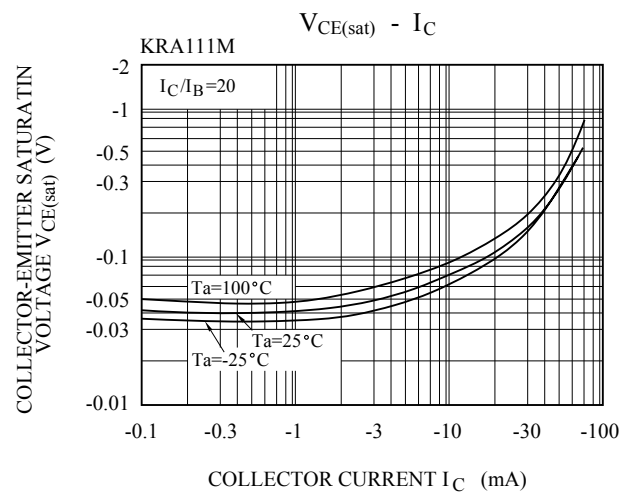
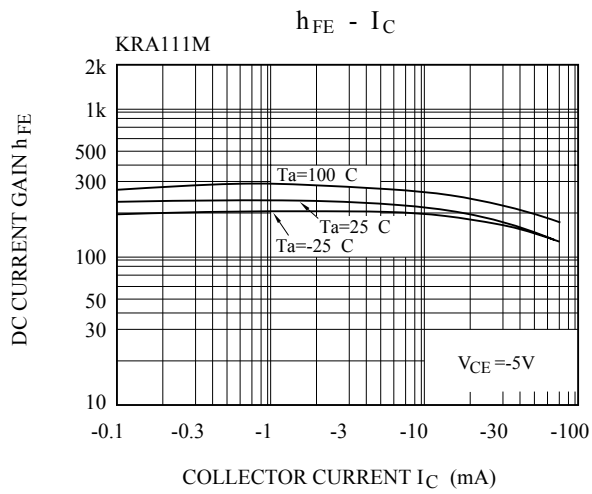
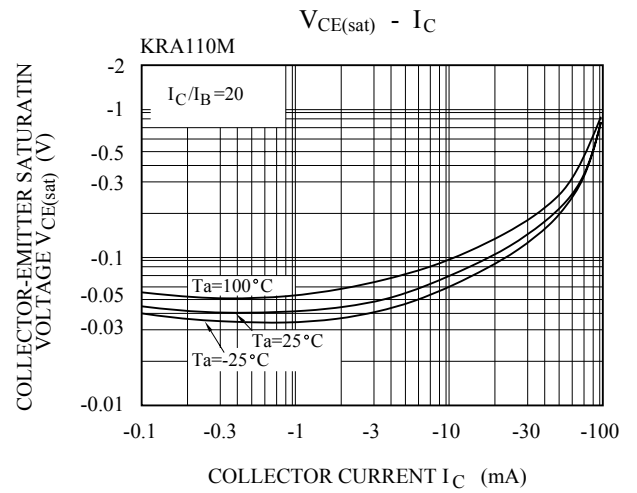
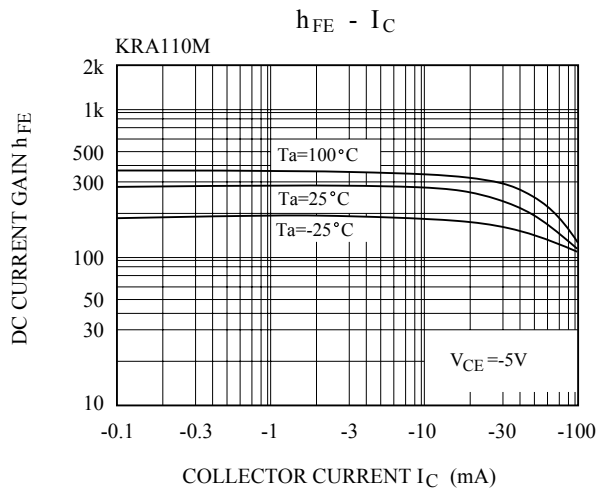
KRA110M~KRA114M

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		KRA110M	R _I		-	4.7	-	kΩ
		KRA111M			-	10	-	
		KRA112M			-	100	-	
		KRA113M			-	22	-	
		KRA114M			-	47	-	
Switching Time	Rise Time	KRA110M	t _r	V _O =-5V V _{IN} =-5V R _L =1kΩ	-	0.2	-	μS
		KRA111M			-	0.065	-	
		KRA112M			-	0.4	-	
		KRA113M			-	0.1	-	
		KRA114M			-	0.15	-	
	Storage Time	KRA110M	t _{stg}		-	2.0	-	
		KRA111M			-	1.7	-	
		KRA112M			-	3.0	-	
		KRA113M			-	2.0	-	
		KRA114M			-	1.5	-	
	Fall Time	KRA110M	t _f		-	0.3	-	
		KRA111M			-	0.3	-	
		KRA112M			-	1.7	-	
		KRA113M			-	0.8	-	
		KRA114M			-	1.5	-	

Note : * Characteristic of Transistor Only.

KRA110M~KRA114M



KRA110M~KRA114M

