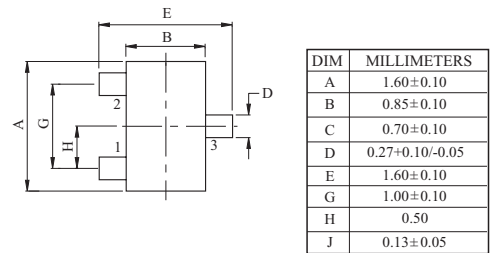
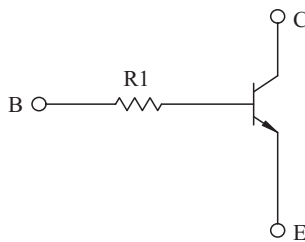


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

FEATURES

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

EQUIVALENT CIRCUIT



1. COMMON (EMITTER)
2. IN (BASE)
3. OUT (COLLECTOR)

ESM

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	100	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55~150	℃

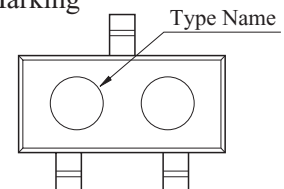
ELECTRICAL CHARACTERISTICS (Ta=25℃)

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	KRC410E	R_1		-	4.7	-	k Ω
	KRC411E			-	10	-	
	KRC412E			-	100	-	
	KRC413E			-	22	-	
	KRC414E			-	47	-	

MARK SPEC

TYPE	KRC410E	KRC411E	KRC412E	KRC413E	KRC414E
MARK	NK	NM	NN	NO	NP

Marking

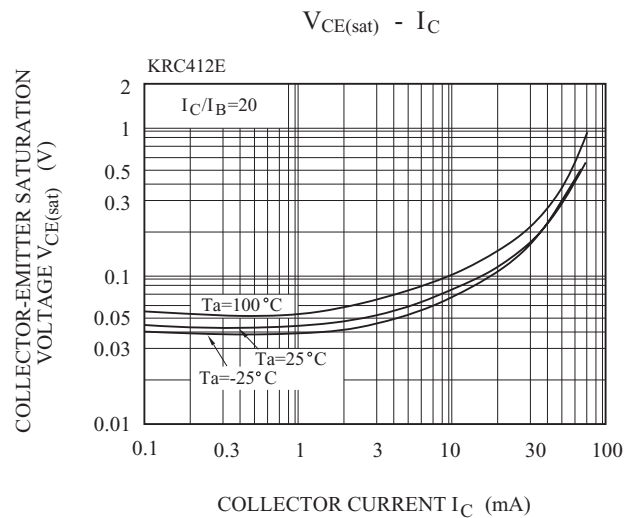
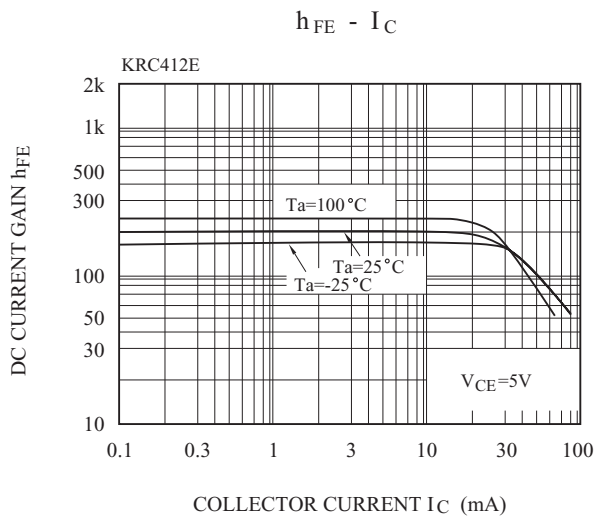
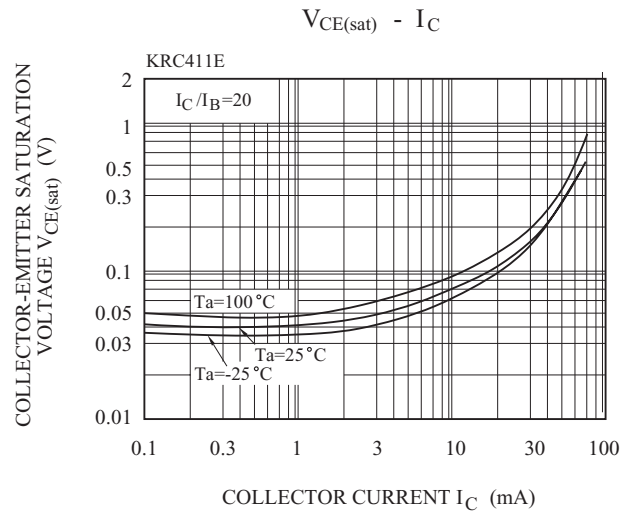
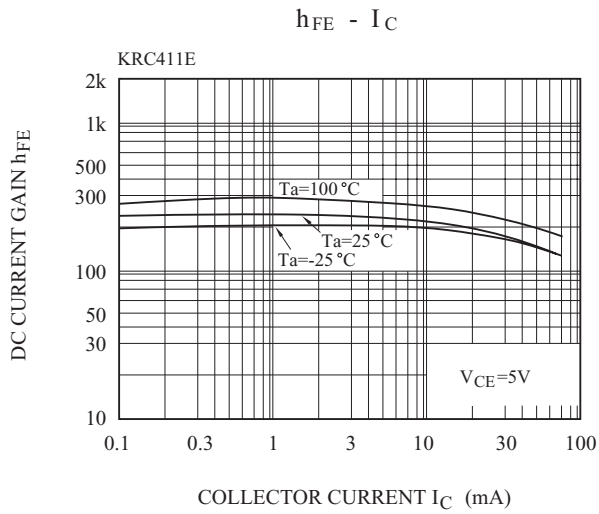
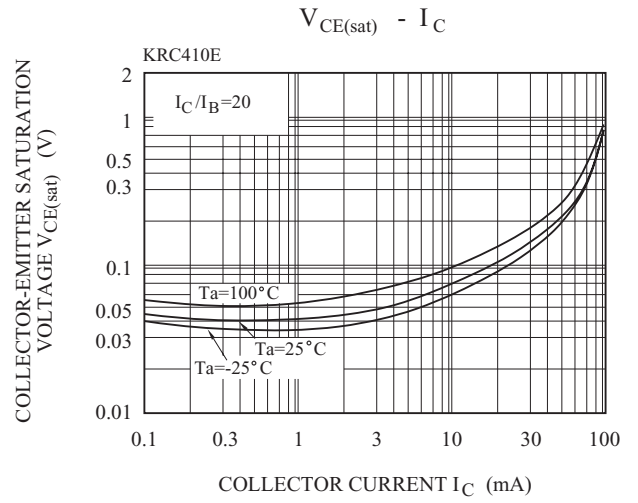
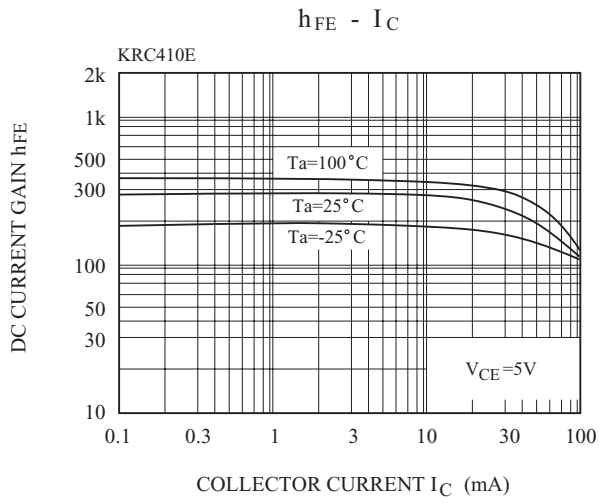


KRC410E~KRC414E

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC410E	t_r	$V_O=5V$ $V_{IN}=5V$ $R_L=1k\ \Omega$	-	0.025	-	μS
		KRC411E			-	0.03	-	
		KRC412E			-	0.3	-	
		KRC413E			-	0.06	-	
		KRC414E			-	0.11	-	
	Storage Time	KRC410E	t_{stg}		-	3.0	-	
		KRC411E			-	2.0	-	
		KRC412E			-	6.0	-	
		KRC413E			-	4.0	-	
		KRC414E			-	5.0	-	
	Fall Time	KRC410E	t_f		-	0.2	-	
		KRC411E			-	0.12	-	
		KRC412E			-	2.0	-	
		KRC413E			-	0.9	-	
		KRC414E			-	1.4	-	

KRC410E~KRC414E



KRC410E~KRC414E

