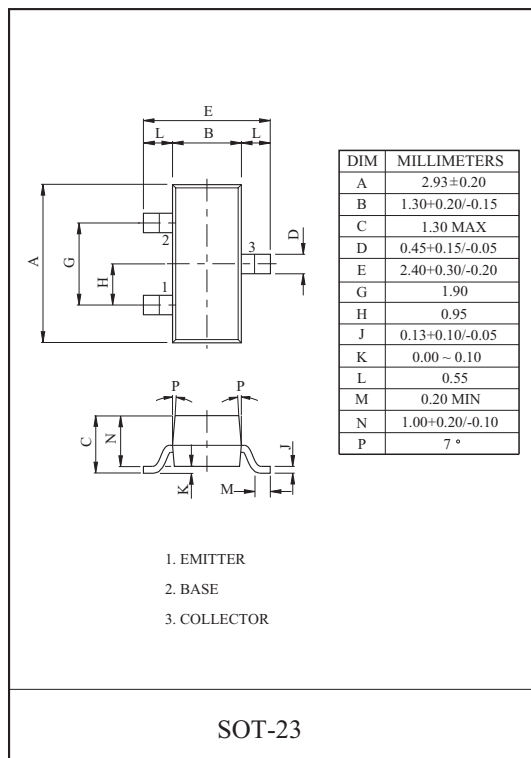
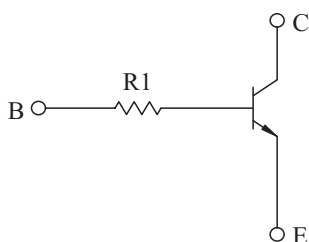


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### 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 <sub>CB0</sub>	50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	50	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	I <sub>C</sub>	100	mA

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector Power Dissipation	P <sub>C</sub>	200	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C

### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

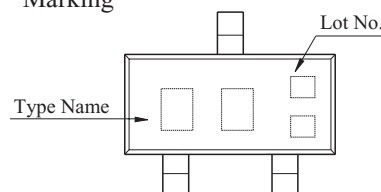
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I <sub>CB0</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0	-	-	100	nA
Emitter Cut-off Current		I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0	-	-	100	nA
DC Current Gain		h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	120	-	-	
Collector-Emitter Saturation Voltage		V <sub>CE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0.5mA	-	0.1	0.3	V
Transition Frequency		f <sub>T</sub> *	V <sub>CE</sub> =10V, I <sub>C</sub> =5mA	-	250	-	MHz
Input Resistor	KRC110S	R <sub>1</sub>		-	4.7	-	k Ω
	KRC111S			-	10	-	
	KRC112S			-	100	-	
	KRC113S			-	22	-	
	KRC114S			-	47	-	

Note : \* Characteristic of Transistor Only.

### MARK SPEC

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

### Marking



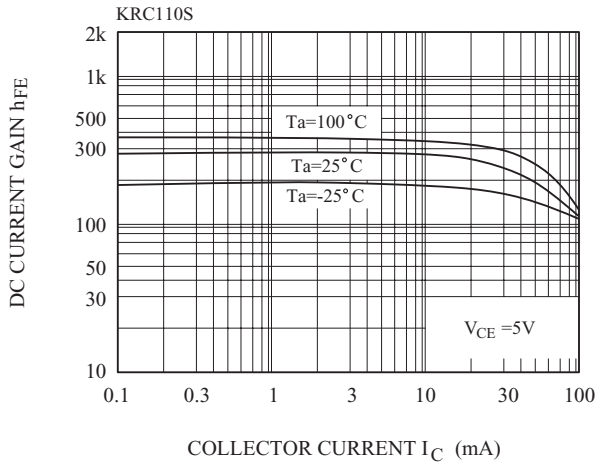
# KRC110S~KRC114S

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

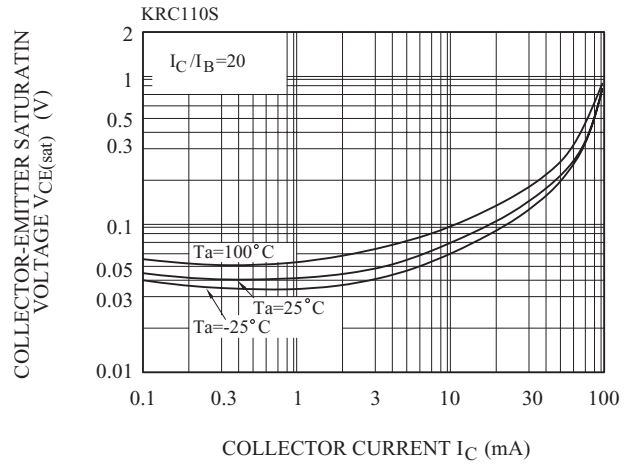
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Switching Time	Rise Time	KRC110S	$V_O=5V$ $V_{IN}=5V$ $R_L=1k \Omega$	-	0.025	-	$\mu S$	
		KRC111S		-	0.03	-		
		KRC112S		-	0.3	-		
		KRC113S		-	0.06	-		
		KRC114S		-	0.11	-		
	Storage Time	KRC110S		$t_{stg}$	-	3.0		-
		KRC111S			-	2.0		-
		KRC112S			-	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		-

# KRC110S~KRC114S

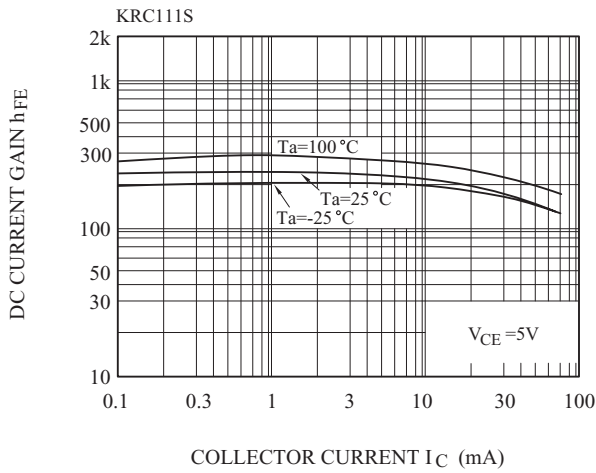
$h_{FE} - I_C$



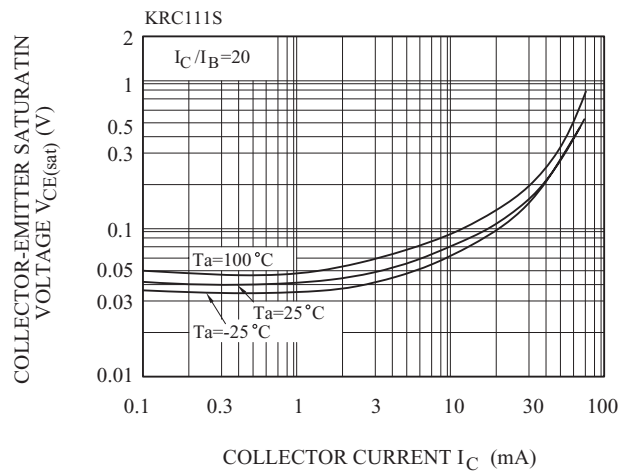
$V_{CE(sat)} - I_C$



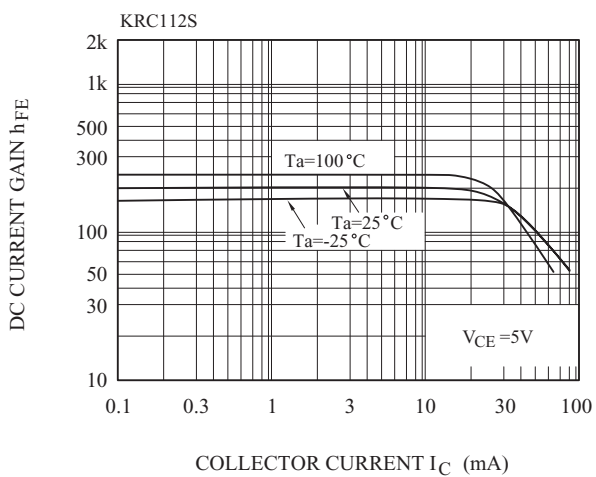
$h_{FE} - I_C$



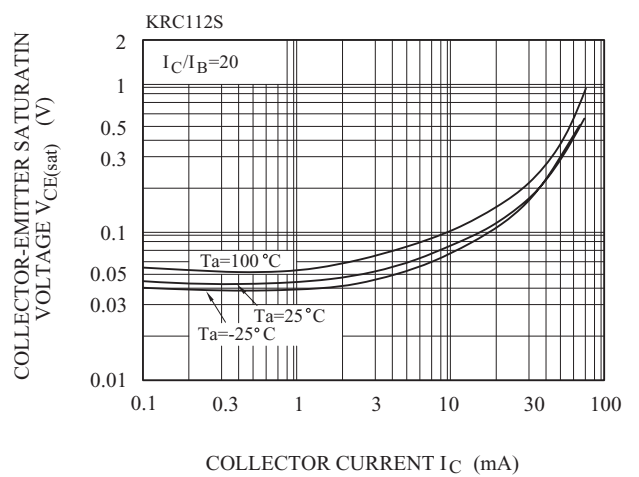
$V_{CE(sat)} - I_C$



$h_{FE} - I_C$

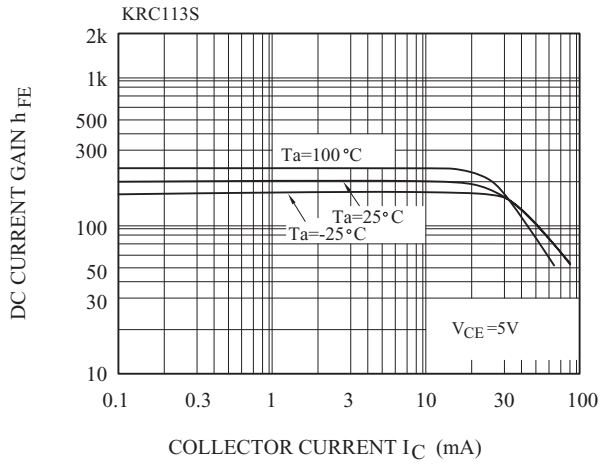


$V_{CE(sat)} - I_C$

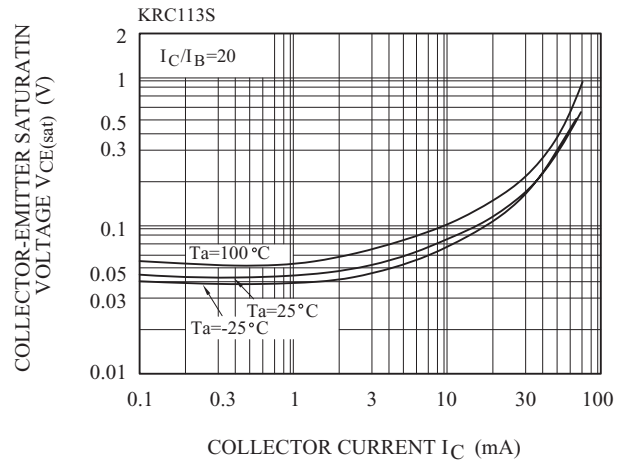


# KRC110S~KRC114S

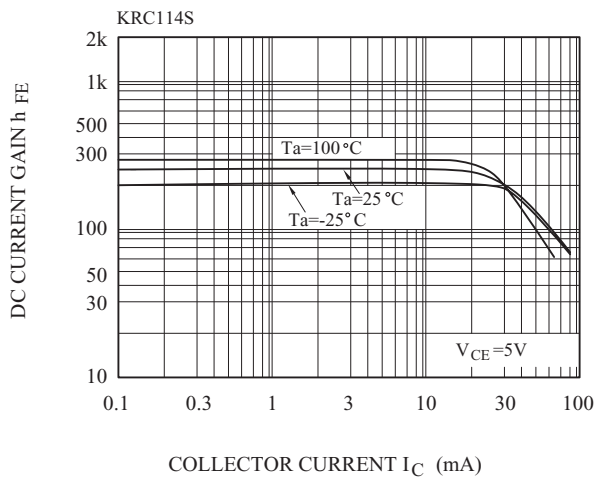
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$

