KRC830E~KRC834E

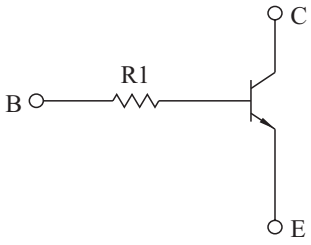
EPITAXIAL PLANAR NPN TRANSISTOR

SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

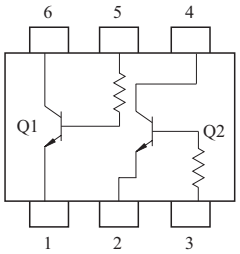
FEATURES

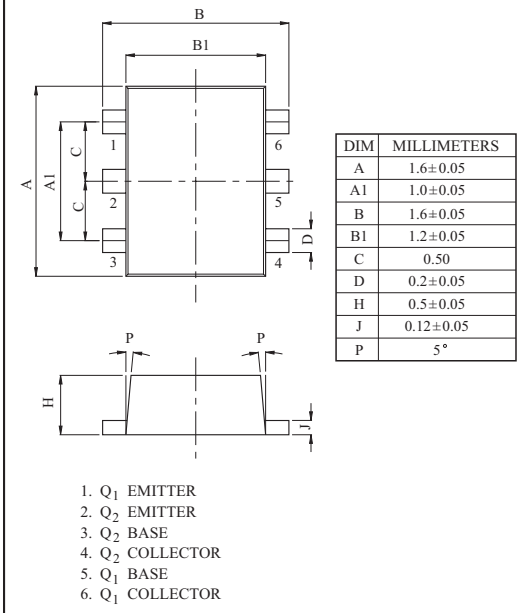
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

EQUIVALENT CIRCUIT



EQUIVALENT CIRCUIT (TOP VIEW)





DIM	MILLIMETERS
A	1.6±0.05
A1	1.0±0.05
B	1.6±0.05
B1	1.2±0.05
C	0.50
D	0.2±0.05
H	0.5±0.05
J	0.12±0.05
P	5°

TES6

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	℃

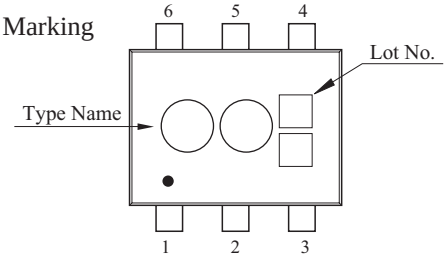
* Total Raing.

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	KRC830E	R_1		-	4.7	-	kΩ
	KRC831E			-	10	-	
	KRC832E			-	100	-	
	KRC833E			-	22	-	
	KRC834E			-	47	-	

Note : * Characteristic of Transistor Only.

Marking



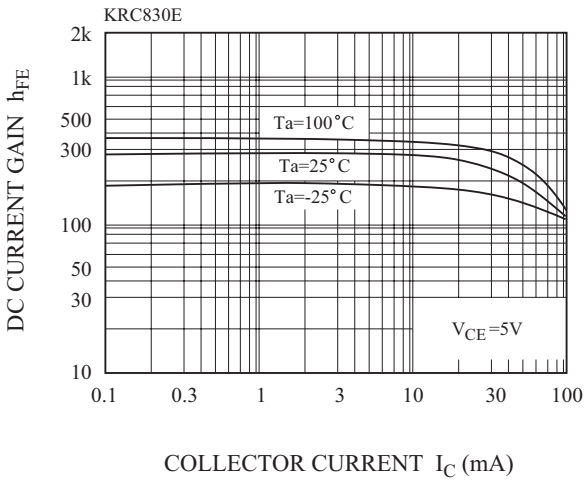
MARK SPEC

TYPE	KRC830E	KRC831E	KRC832E	KRC833E	KRC834E
MARK	YK	YM	YN	YO	YP

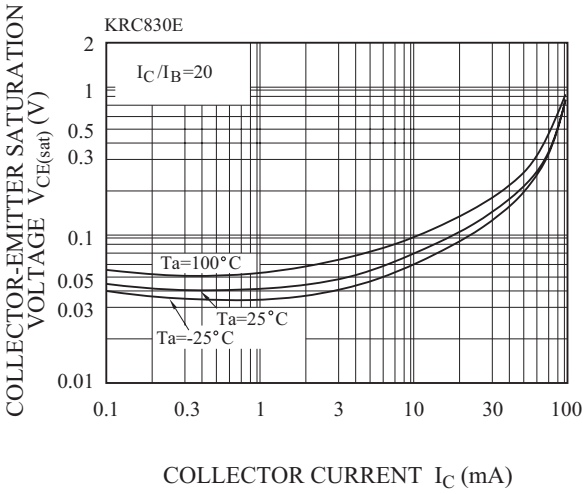
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC830E	t_r	V_O=5V V_{IN}=5V R_L=1k Ω	-	0.025	-	μS
		KRC831E			-	0.03	-	
		KRC832E			-	0.3	-	
		KRC833E			-	0.06	-	
		KRC834E			-	0.11	-	
	Storage Time	KRC830E	t_{stg}		-	3.0	-	
		KRC831E			-	2.0	-	
		KRC832E			-	6.0	-	
		KRC833E			-	4.0	-	
		KRC834E			-	5.0	-	
	Fall Time	KRC830E	t_f		-	0.2	-	
		KRC831E			-	0.12	-	
		KRC832E			-	2.0	-	
		KRC833E			-	0.9	-	
		KRC834E			-	1.4	-	

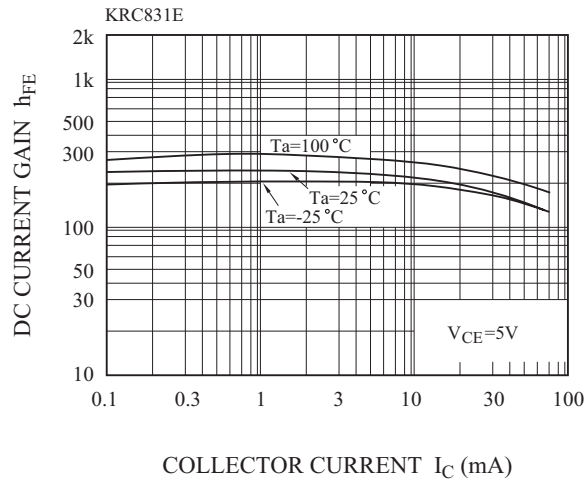
h_{FE} - I_C



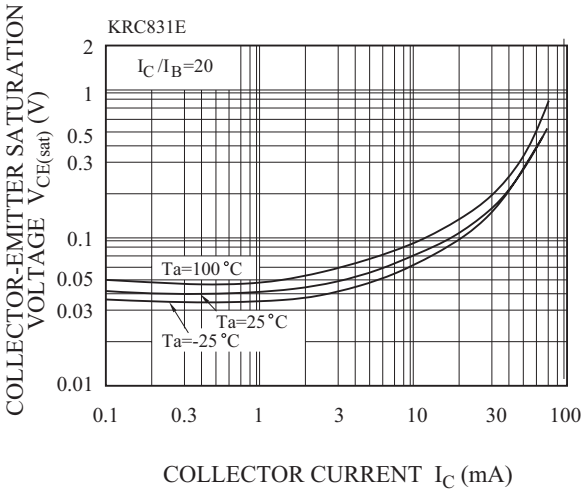
$V_{CE(sat)}$ - I_C



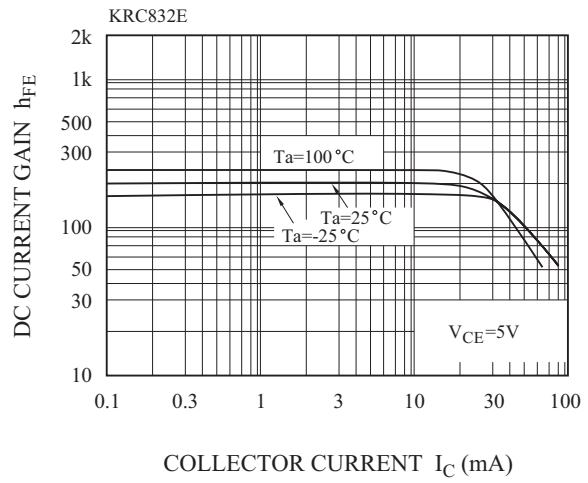
h_{FE} - I_C



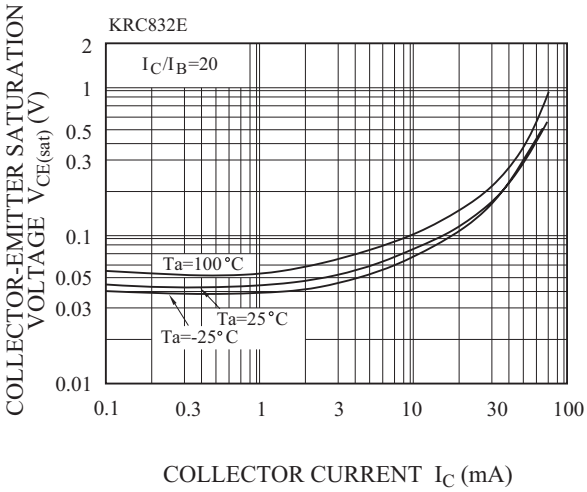
$V_{CE(sat)}$ - I_C



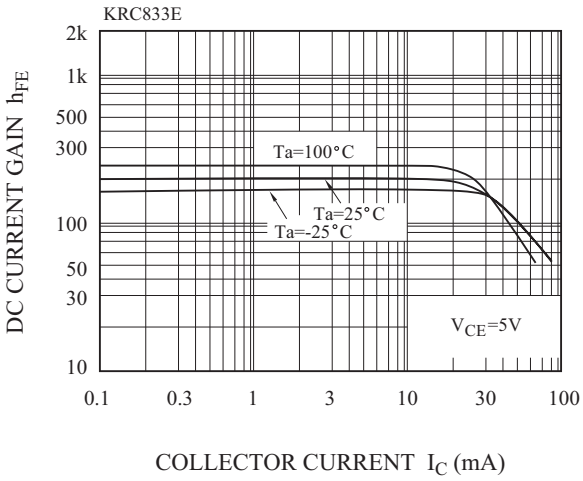
h_{FE} - I_C



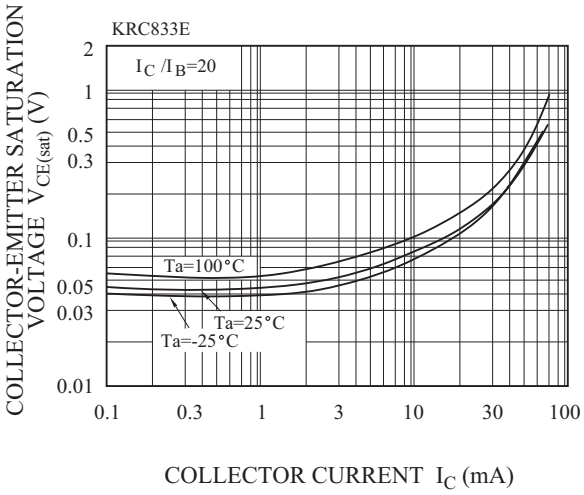
$V_{CE(sat)}$ - I_C



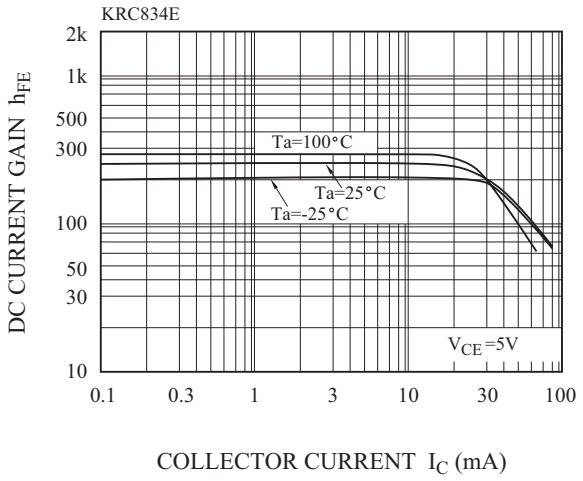
h_{FE} - I_C



$V_{CE(sat)}$ - I_C



h_{FE} - I_C



$V_{CE(sat)}$ - I_C