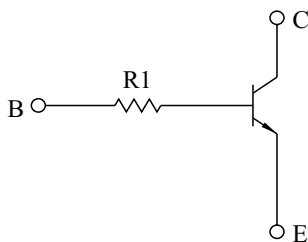


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

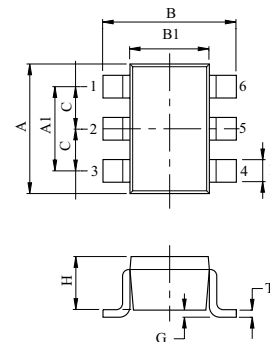
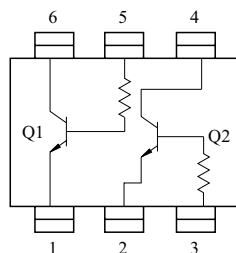
FEATURES

- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.
- Suffix U : Qualified to AEC-Q101.
ex) KRC830U-RTK/HU

EQUIVALENT CIRCUIT



EQUIVALENT CIRCUIT (TOP VIEW)



DIM	MILLIMETERS
A	2.00±0.20
A1	1.3±0.1
B	2.1±0.1
B1	1.25±0.1
C	0.65
D	0.2+0.10/-0.05
G	0-0.1
H	0.9±0.1
T	0.15+0.1/-0.05

1. Q₁ EMITTER
2. Q₂ EMITTER
3. Q₂ BASE
4. Q₂ COLLECTOR
5. Q₁ BASE
6. Q₁ COLLECTOR

US6

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector Power Dissipation	P _C *	200	mW
Junction Temperature	T _j	-55~150	
Storage Temperature Range	T _{stg}	-55~150	

* Total Raing.

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

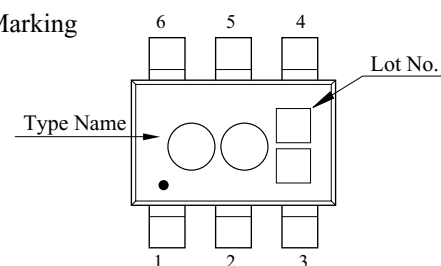
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CBO}	V _{CB} =50V, I _E =0	-	-	100	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} =5V, I _C =0	-	-	100	nA
DC Current Gain	h _{FE}	V _{CE} =5V, I _C =1mA	120	-	-	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =0.5mA	-	0.1	0.3	V
Transition Frequency	f _T *	V _{CE} =10V, I _C =5mA	-	250	-	MHz
Input Resistor	KRC830U	R ₁	3.29	4.7	6.11	kΩ
	KRC831U		7	10	13	
	KRC832U		70	100	130	
	KRC833U		15.4	22	28.6	
	KRC834U		32.9	47	61.1	

Note : * Characteristic of Transistor Only.

MARK SPEC

TYPE	KRC830U	KRC831U	KRC832U	KRC833U	KRC834U
MARK	YK	YM	YN	YO	YP

Marking



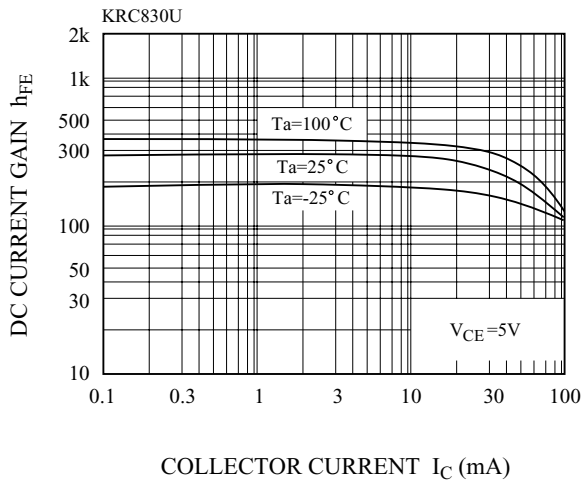
KRC830U~KRC834U

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

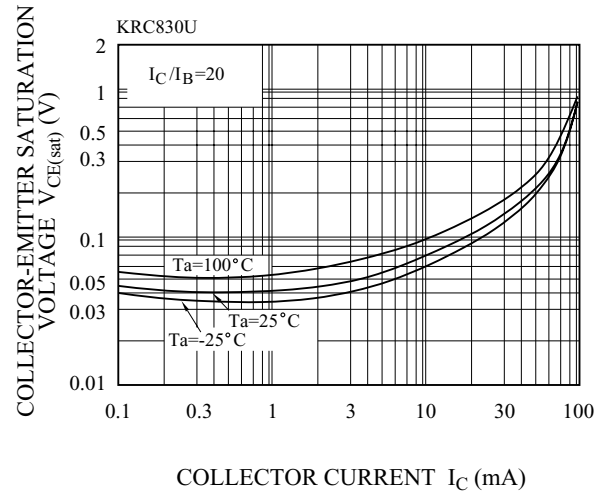
CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC830U	t _r	V _O =5V V _{IN} =5V R _L =1kΩ	-	0.025	-	μs
		KRC831U			-	0.03	-	
		KRC832U			-	0.3	-	
		KRC833U			-	0.06	-	
		KRC834U			-	0.11	-	
	Storage Time	KRC830U	t _{stg}		-	3.0	-	
		KRC831U			-	2.0	-	
		KRC832U			-	6.0	-	
		KRC833U			-	4.0	-	
		KRC834U			-	5.0	-	
	Fall Time	KRC830U	t _f		-	0.2	-	
		KRC831U			-	0.12	-	
		KRC832U			-	2.0	-	
		KRC833U			-	0.9	-	
		KRC834U			-	1.4	-	

KRC830U~KRC834U

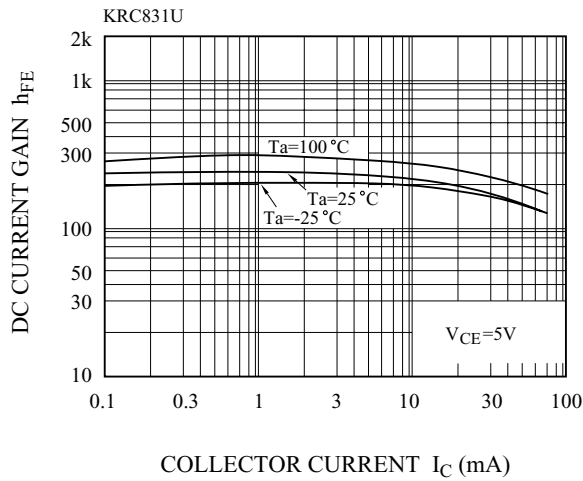
$h_{FE} - I_C$



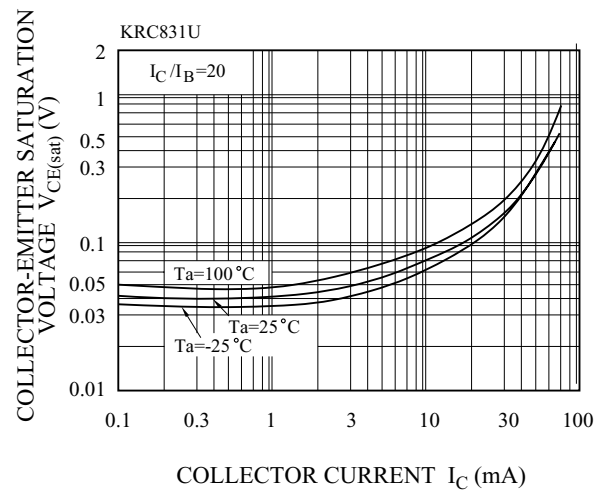
$V_{CE(sat)} - I_C$



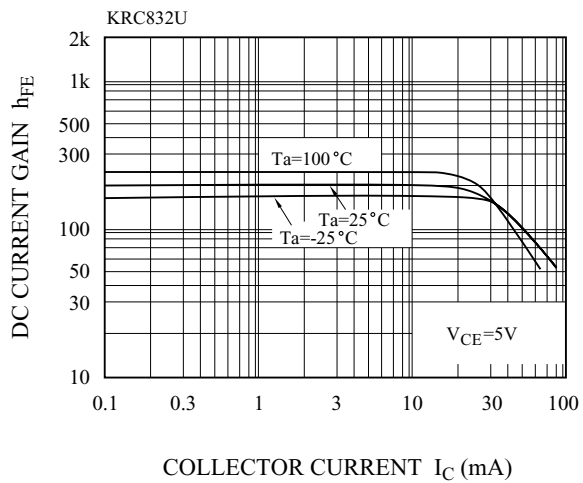
$h_{FE} - I_C$



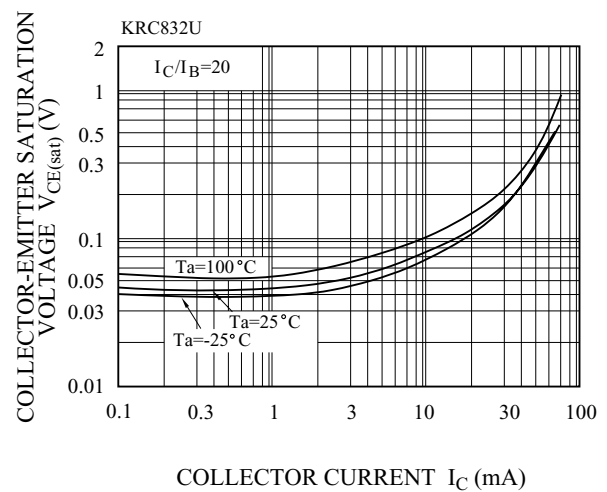
$V_{CE(sat)} - I_C$



$h_{FE} - I_C$

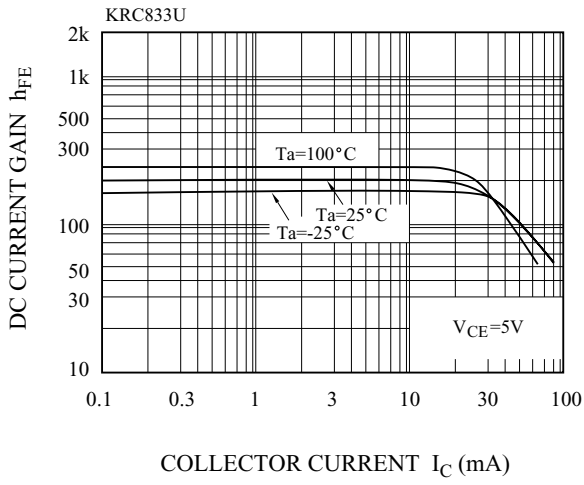


$V_{CE(sat)} - I_C$

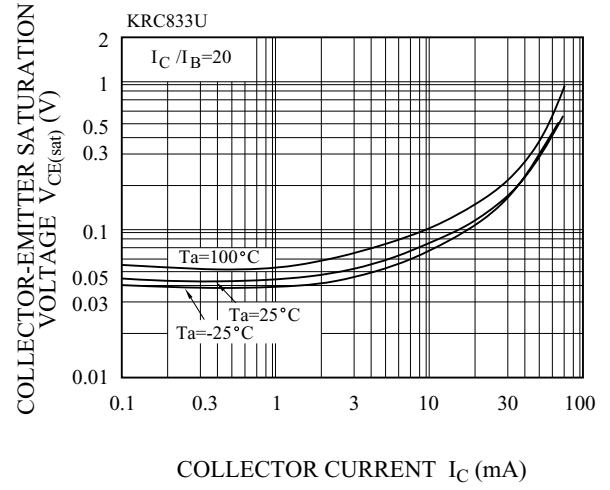


KRC830U~KRC834U

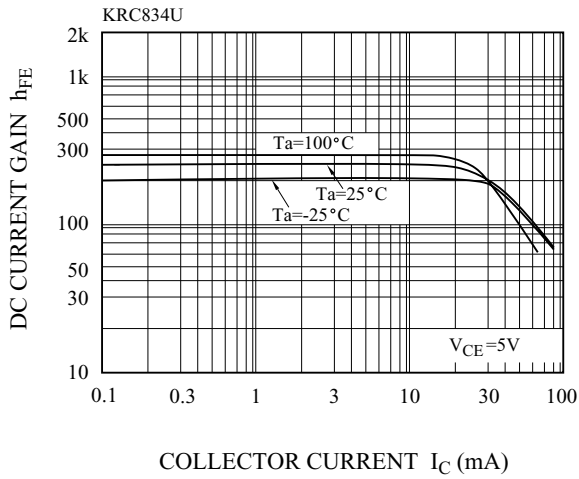
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$

