

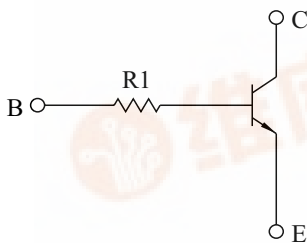
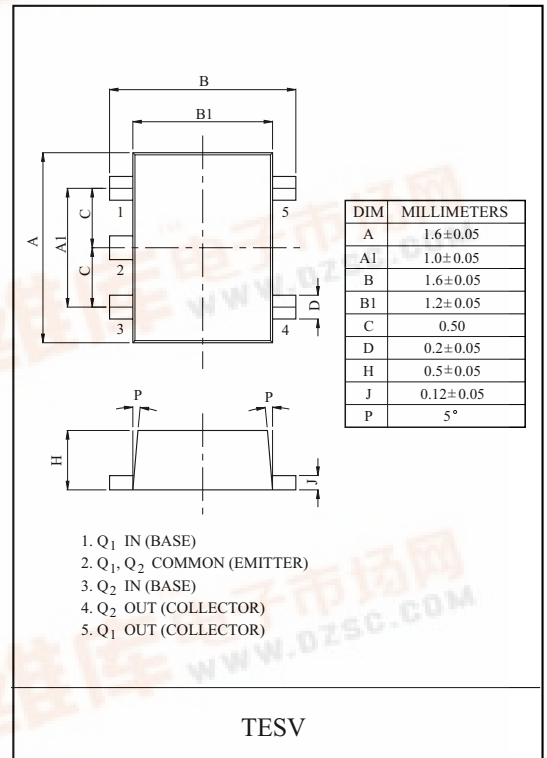
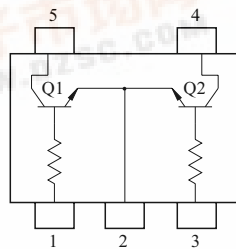
KEC**SEMICONDUCTOR
TECHNICAL DATA****KRC660E~KRC664E****EPITAXIAL PLANAR NPN TRANSISTOR**

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)****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 Rating.

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	KRC660E	R_1		-	4.7	-	kΩ
	KRC661E			-	10	-	
	KRC662E			-	100	-	
	KRC663E			-	22	-	
	KRC664E			-	47	-	

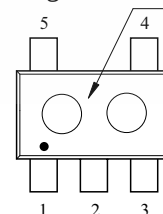
Note : * Characteristic of Transistor Only.

Marking

Type Name

MARK SPEC

TYPE	KRC660E	KRC661E	KRC662E	KRC663E	KRC664E
MARK	NK	NM	NN	NO	NP

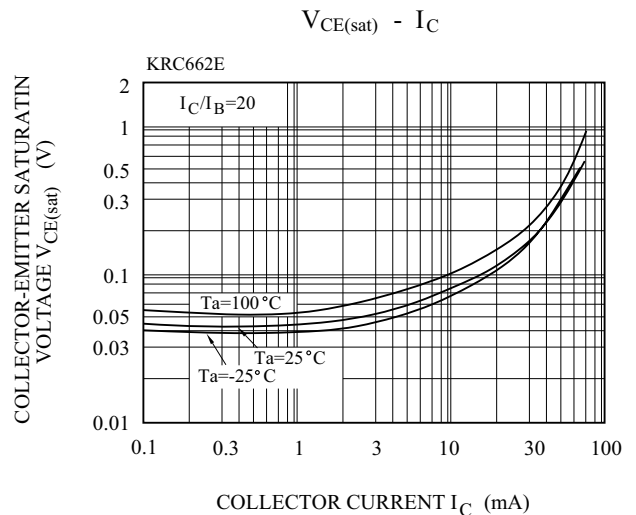
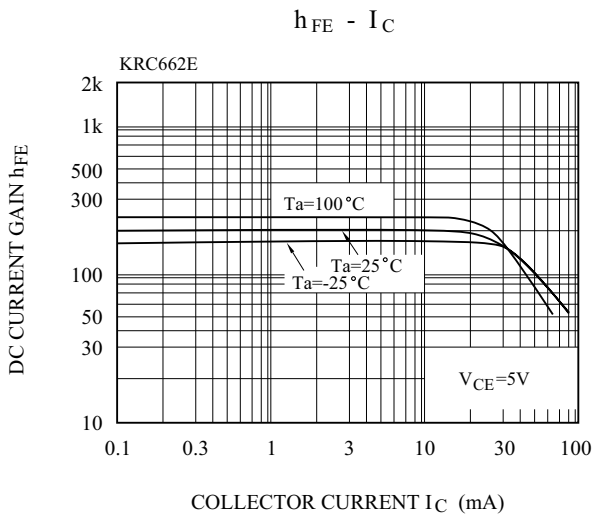
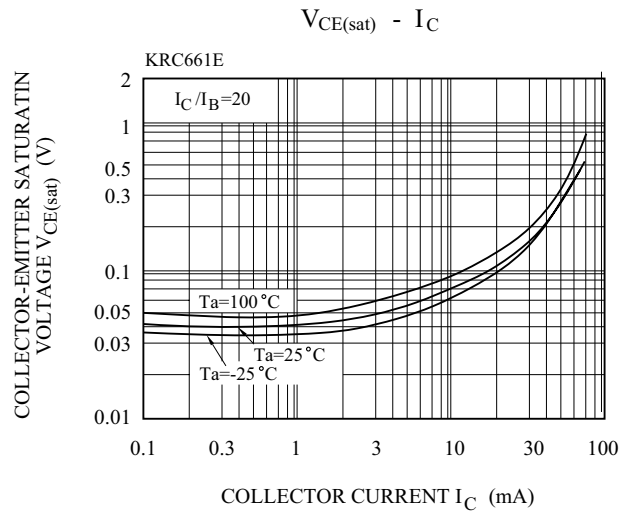
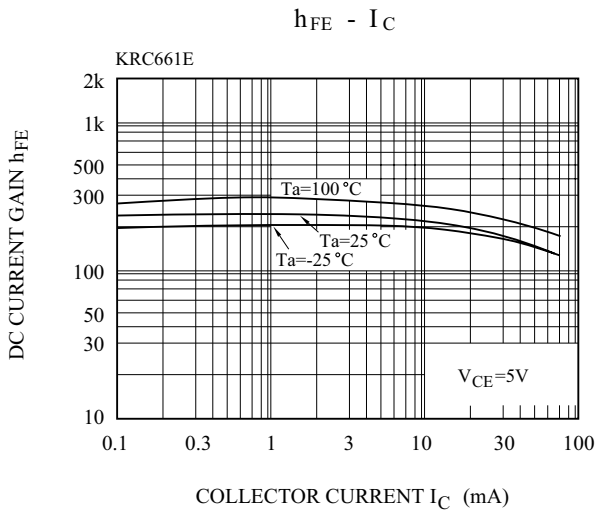
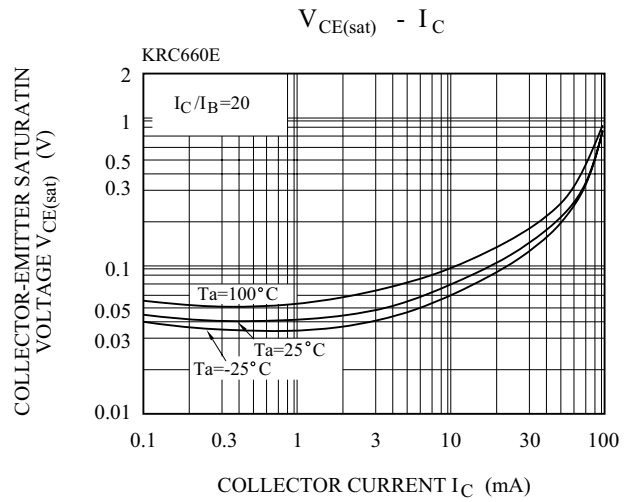
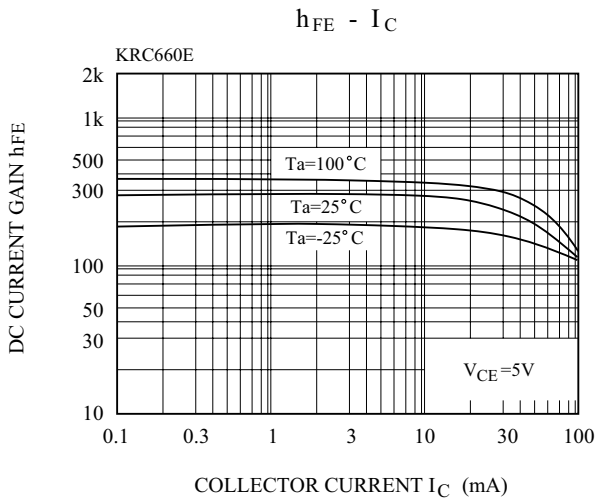


KRC660E~KRC664E

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC660E	t _r	V _O =5V V _{IN} =5V R _L =1k Ω	-	0.025	-	μS
		KRC661E			-	0.03	-	
		KRC662E			-	0.3	-	
		KRC663E			-	0.06	-	
		KRC664E			-	0.11	-	
	Storage Time	KRC660E	t _{stg}		-	3.0	-	
		KRC661E			-	2.0	-	
		KRC662E			-	6.0	-	
		KRC663E			-	4.0	-	
		KRC664E			-	5.0	-	
	Fall Time	KRC660E	t _f		-	0.2	-	
		KRC661E			-	0.12	-	
		KRC662E			-	2.0	-	
		KRC663E			-	0.9	-	
		KRC664E			-	1.4	-	

KRC660E~KRC664E



KRC660E~KRC664E

