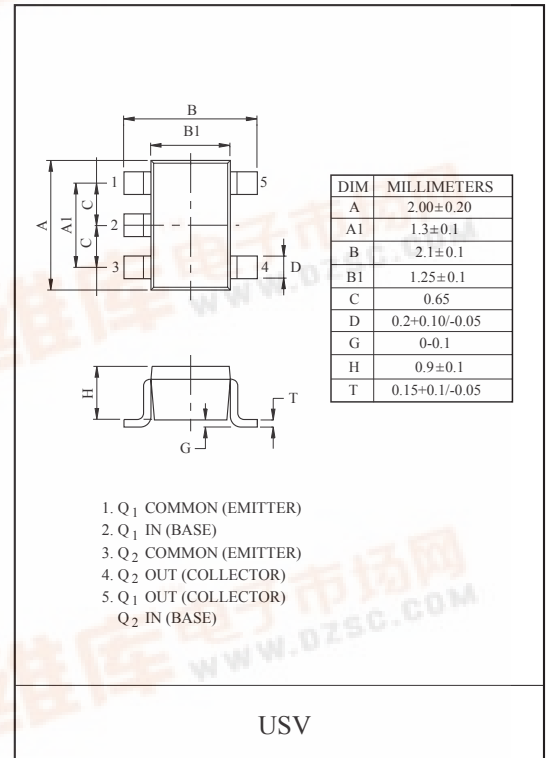
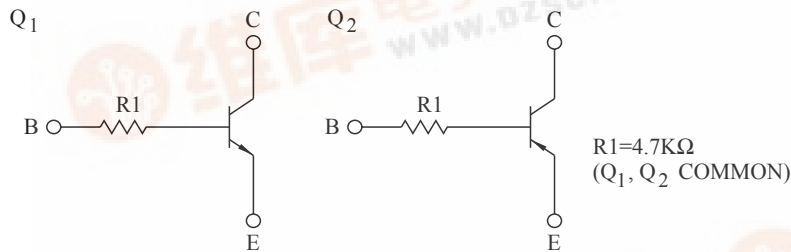


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

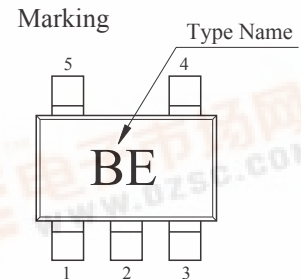
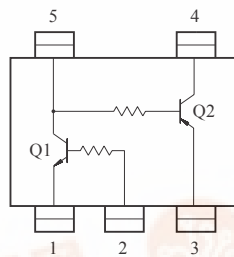
FEATURES

- Including two devices in USV.
(Ultra Super mini type with 5 leads.)
- With Built-in bias resistors.
- Simplify circuit design.
- Reduce a quantity of parts and manufacturing process.

EQUIVALENT CIRCUIT



EQUIVALENT CIRCUIT (TOP VIEW)



Q1 MAXIMUM RATING (Ta=25°C)

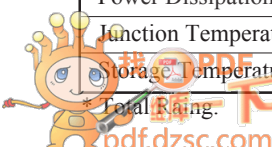
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA

Q2 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

Q1, Q2 MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P_C^*	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C



KRX105U

Q₁ 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	R _I		-	4.7	-	kΩ

Note : * Characteristic of Transistor Only.

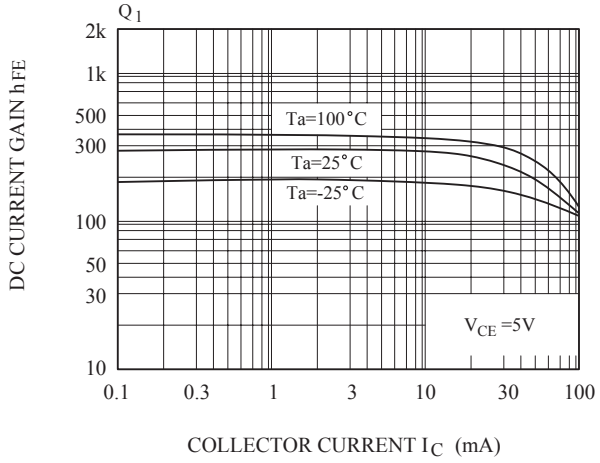
Q₂ ELECTRICAL CHARACTERISTICS (Ta=25°C)

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	R _I		-	4.7	-	kΩ

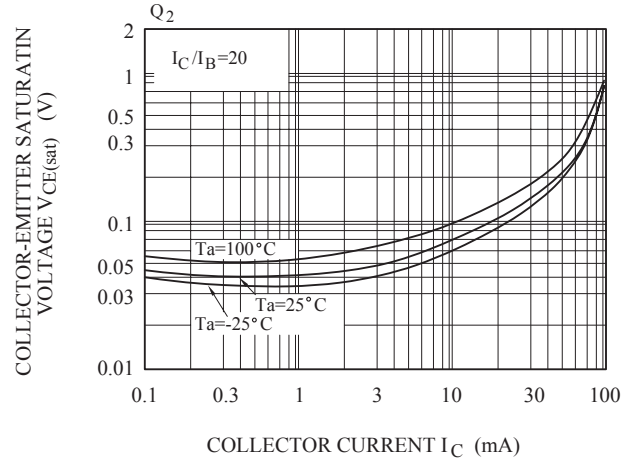
Note : * Characteristic of Transistor Only.

KRX105U

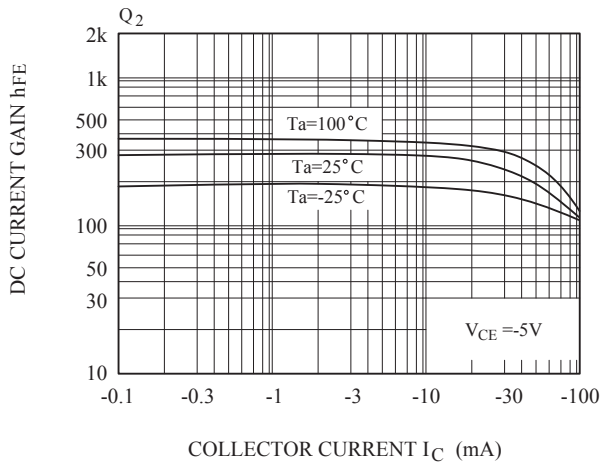
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$

