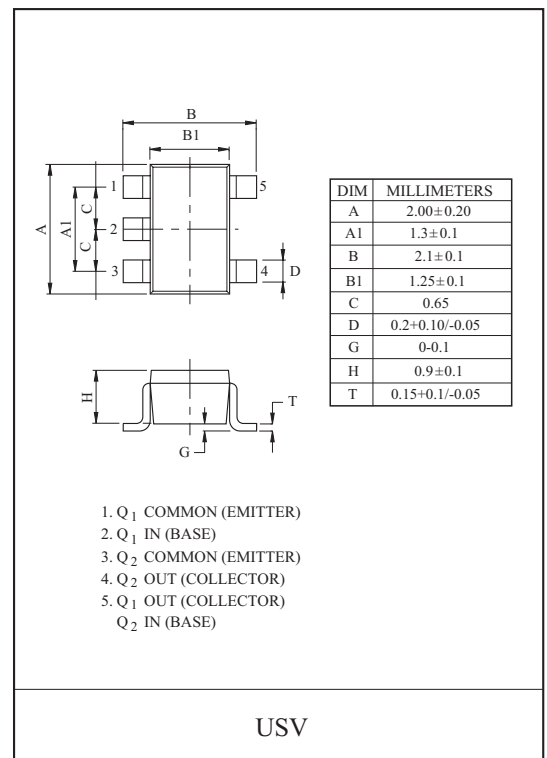
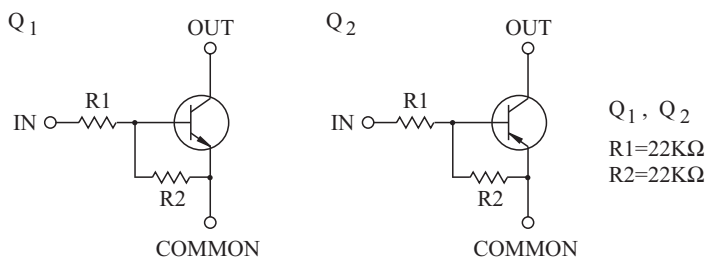


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

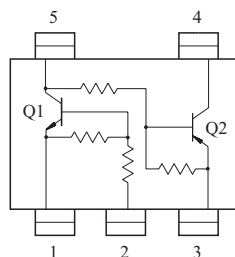
FEATURES

- 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.
- Suffix U : Qualified to AEC-Q101.
ex) KRX103U-RTK/HU

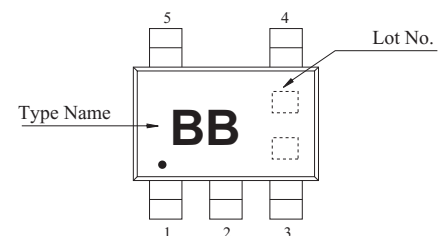
EQUIVALENT CIRCUIT



EQUIVALENT CIRCUIT (TOP VIEW)



Marking



Q1 MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Output Voltage	V _O	50	V
Input Voltage	V _I	40, -10	V
Output Current	I _O	100	mA

Q2 MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Output Voltage	V _O	-50	V
Input Voltage	V _I	-40, 10	V
Output Current	I _O	-100	mA

Q1, Q2 MAXIMUM RATING (Ta=25°C)

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

* Total Rating.

KRX103U

Q1 ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Output Cut-off Current	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	G_I	$V_O=5V, I_O=10mA$	70	120	-	
Output Voltage	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	2.1	3.0	V
Input Voltage (OFF)	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
Transition Frequency	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	I_I	$V_I=5V$	-	-	0.36	mA
Input Resistor	R1	-	15.4	22	28.6	kΩ
Resistor Ratio	R_1/R_2	-	0.8	1	1.2	-

Note : * Characteristic of Transistor Only.

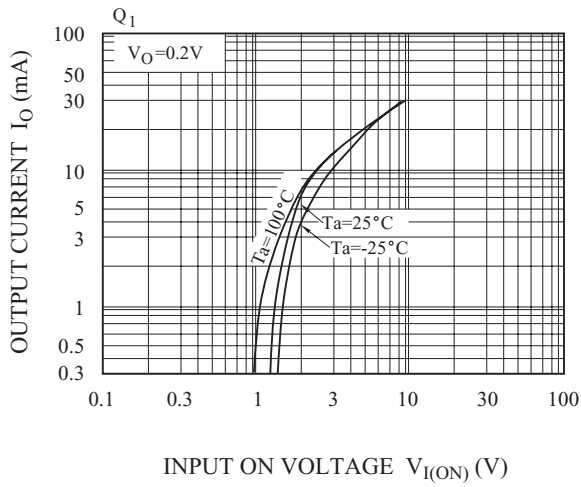
Q2 ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Output Cut-off Current	$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA
DC Current Gain	G_I	$V_O=-5V, I_O=-10mA$	70	120	-	
Output Voltage	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-2.1	-3.0	V
Input Voltage (OFF)	$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-1.0	-1.2	-	V
Transition Frequency	f_T^*	$V_O=-10V, I_O=-5mA$	-	200	-	MHz
Input Current	I_I	$V_I=-5V$	-	-	-0.36	mA
Input Resistor	R1	-	15.4	22	28.6	kΩ
Resistor Ratio	R_1/R_2	-	0.8	1	1.2	-

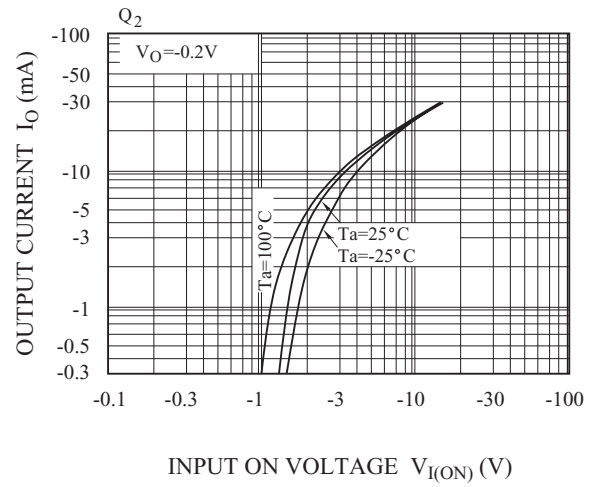
Note : * Characteristic of Transistor Only.

KRX103U

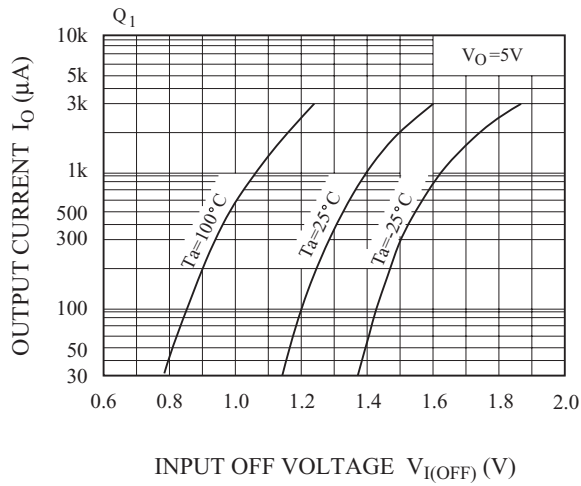
$I_O - V_{I(ON)}$



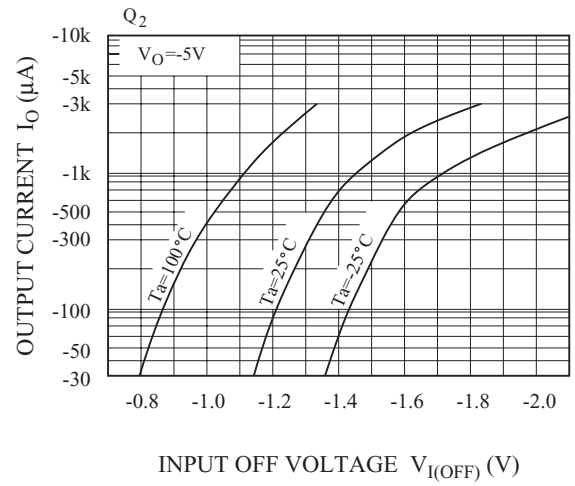
$I_O - V_{I(ON)}$



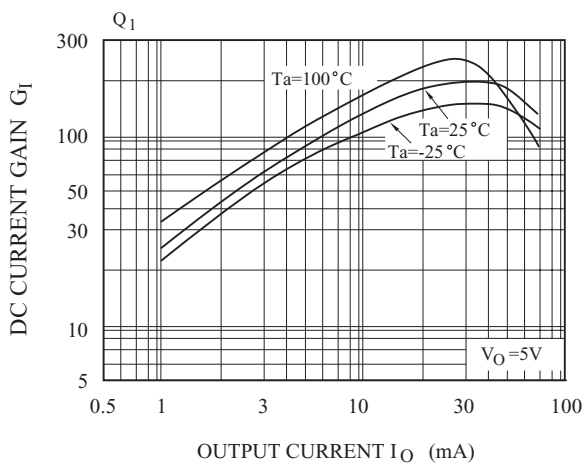
$I_O - V_{I(OFF)}$



$I_O - V_{I(OFF)}$



$G_I - I_O$



$G_I - I_O$

