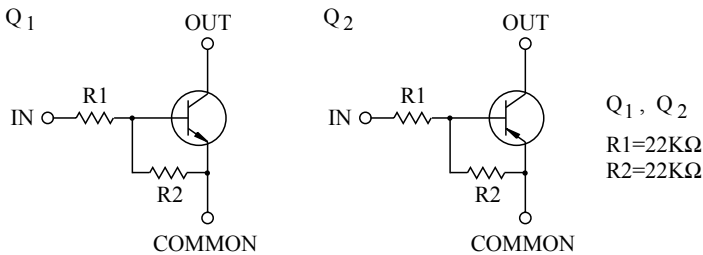


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

**FEATURES**

- Including two devices in US6.  
(Ultra Super mini type with 6 leads.)
- With Built-in bias resistors.
- Simplify circuit design.
- Reduce a quantity of parts and manufacturing process.

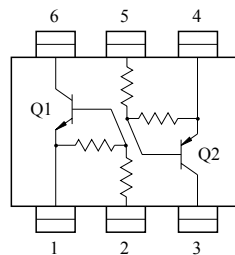
**EQUIVALENT CIRCUIT**



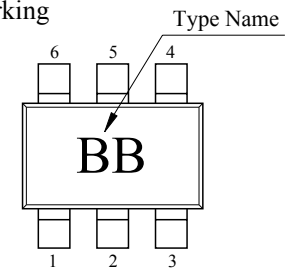
DIM	MILLIMETERS
A	2.00±0.20
A1	1.3±0.1
B	2.1±0.1
B1	1.25±0.1
C	0.65
D	0.2+0.10/-0.05
G	0-0.1
H	0.9±0.1
T	0.15+0.1/-0.05

**US6**

**EQUIVALENT CIRCUIT (TOP VIEW)**



**Marking**



**Q1 MAXIMUM RATING (Ta=25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Output Voltage	V <sub>O</sub>	50	V
Input Voltage	V <sub>I</sub>	40, -10	V
Output Current	I <sub>O</sub>	100	mA

**Q2 MAXIMUM RATING (Ta=25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Output Voltage	V <sub>O</sub>	-50	V
Input Voltage	V <sub>I</sub>	-40, 10	V
Output Current	I <sub>O</sub>	-100	mA

**Q3 MAXIMUM RATING (Ta=25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P <sub>D</sub> *	200	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C

\* Total Raing.

# KRX202U

## Q1 ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Output Cut-off Current	$I_{O(OFF)}$	$V_O=5V, V_I=0$	-	-	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

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

Note : \* Characteristic of Transistor Only.

# KRX202U

