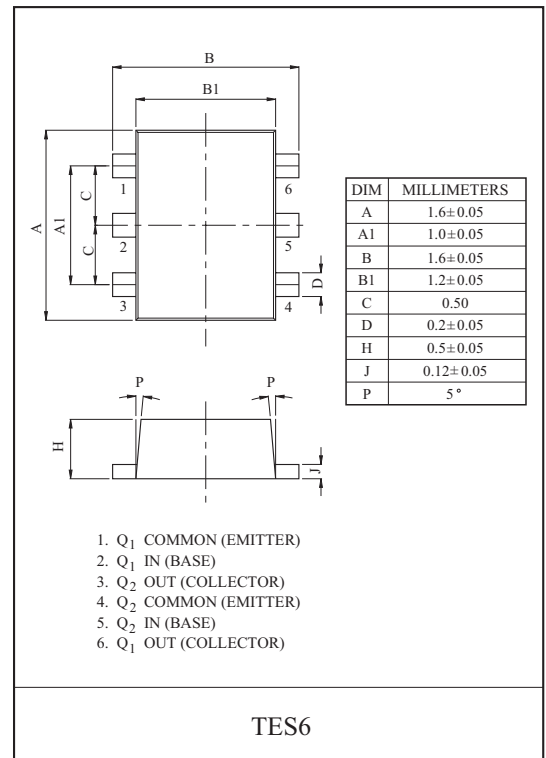
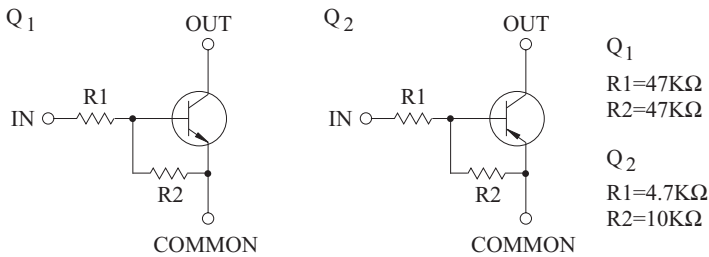


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

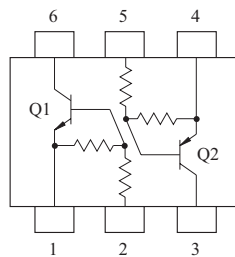
### FEATURES

- Including two devices in TES6.  
(Thin Extreme Super mini type with 6 pin.)
- With Built-in bias resistors.
- Simplify circuit design.
- Reduce a quantity of parts and manufacturing process.

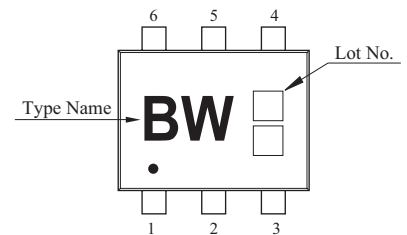
### EQUIVALENT CIRCUIT



### 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>	-20, 7	V
Output Current	I <sub>O</sub>	-100	mA

### Q1, Q2 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 Rating.

# KRX208E

## 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	$G_I$	$V_O=5V, I_O=10mA$	80	200	-	
Output Voltage	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	2.8	5.0	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	$I_I$	$V_I=5V$	-	-	0.18	mA
Input Resistor	R1	-	32.9	47	61.1	kΩ
Resistor Ratio	$R_1/R_2$	-	0.8	1	1.2	-

Note : \* Characteristic of Transistor Only.

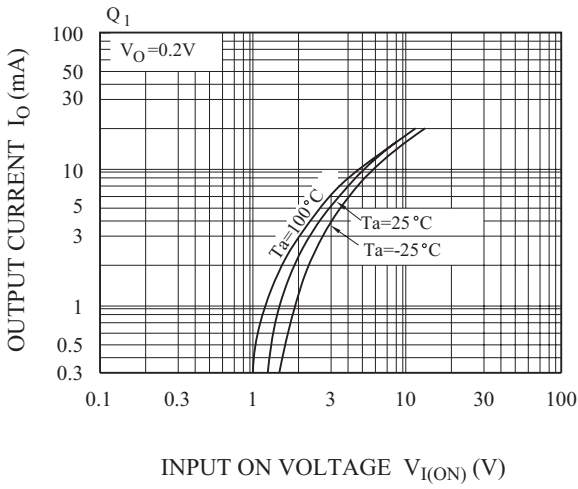
## Q2 ELECTRICAL CHARACTERISTICS (Ta=25 °C)

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	$G_I$	$V_O=-5V, I_O=-10mA$	30	-	-	
Output Voltage	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	$V_{I(ON)}$	$V_O=-0.3V, I_O=-20mA$	-	-1.76	-2.5	V
Input Voltage (OFF)	$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-0.3	-0.82	-	V
Transition Frequency	$f_T^*$	$V_O=-10V, I_O=-5mA$	-	250	-	MHz
Input Current	$I_I$	$V_I=-5V$	-	-	-1.8	mA
Input Resistor	R1	-	3.29	4.7	6.11	kΩ
Resistor Ratio	$R_1/R_2$	-	1.7	2.1	2.6	-

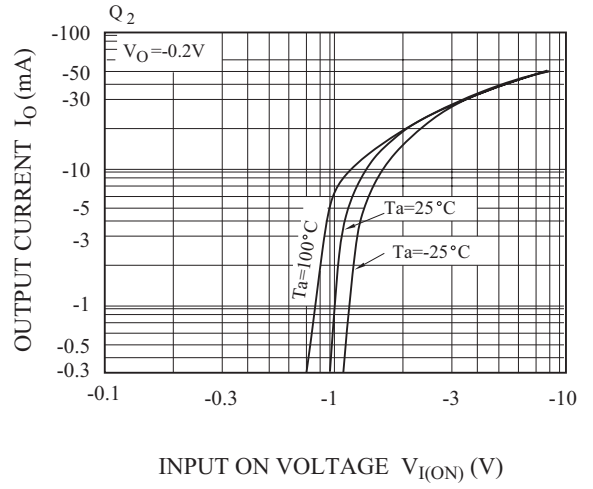
Note : \* Characteristic of Transistor Only.

# KRX208E

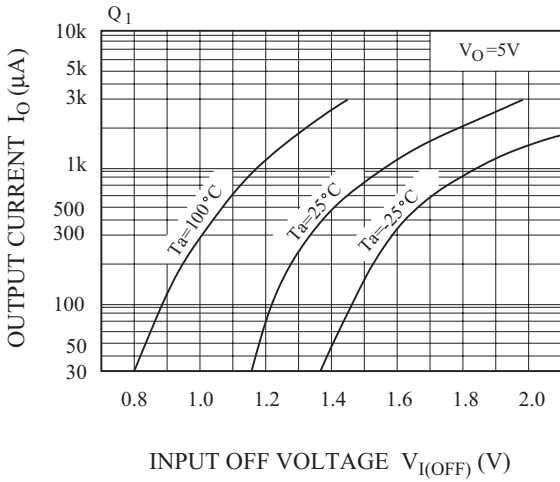
$I_O - V_{I(ON)}$



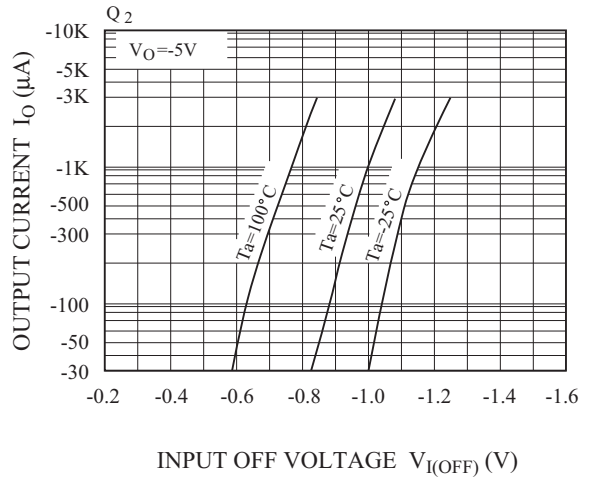
$I_O - V_{I(ON)}$



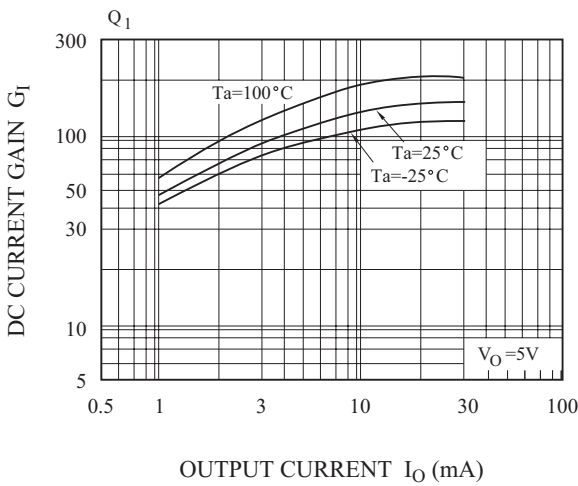
$I_O - V_{I(OFF)}$



$I_O - V_{I(OFF)}$



$G_I - I_O$



$G_I - I_O$

