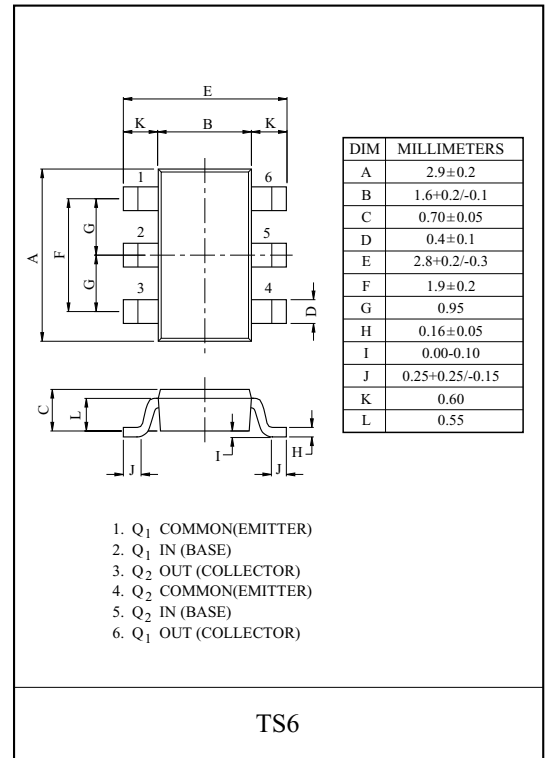
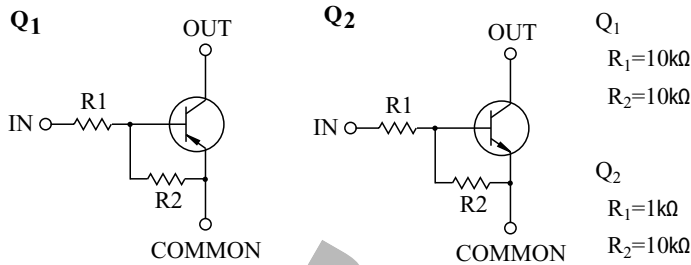


SWITCHING APPLICATION.
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

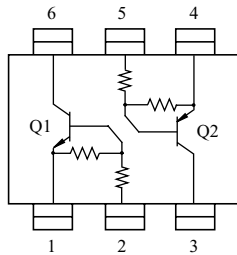
FEATURES

- Including two devices in TS6.
- With Built-in bias resistors.
- Simplify circuit design.
- Reduce a quantity of parts and manufacturing process.

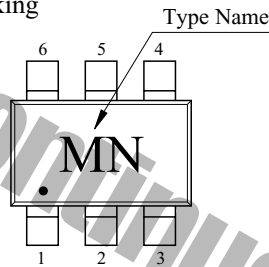
EQUIVALENT CIRCUIT



EQUIVALENT CIRCUIT (TOP VIEW)



Marking



Q1 MAXIMUM RATING (Ta=25)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|----------------|--------|---------|------|
| Output Voltage | V_O | 50 | V |
| Input Voltage | V_I | 30, -10 | V |
| Output Current | I_O | 100 | mA |

Q2 MAXIMUM RATING (Ta=25)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|----------------|--------|--------|------|
| Output Voltage | V_O | -50 | V |
| Input Voltage | V_I | -10, 5 | V |
| Output Current | I_O | -800 | mA |

Q1, Q2 MAXIMUM RATING (Ta=25)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------|-----------|---------|------|
| Power Dissipation | P_D^* | 300 | mW |
| Junction Temperature | T_j | 150 | |
| Storage Temperature Range | T_{stg} | -55 150 | |

* Total Rating.

KRX210T

Q1 ELECTRICAL CHARACTERISTICS (Ta=25)

| 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 | $V_O=5V, I_O=10mA$ | 50 | 80 | - | |
| Output Voltage | $V_{O(ON)}$ | $I_O=10mA, I_I=0.5mA$ | - | 0.1 | 0.3 | V |
| Input Voltage (ON) | $V_{I(ON)}$ | $V_O=0.2V, I_O=5mA$ | - | 1.8 | 2.4 | 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 | $V_I=5V$ | - | - | 0.88 | mA |
| Input resistance | R_I | - | 7 | 10 | 13 | kΩ |
| Resistance Ratio | R_2/R_1 | - | 0.8 | 1 | 1.2 | - |

Note : * Characteristic of Transistor Only.

Q2 ELECTRICAL CHARACTERISTICS (Ta=25)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT. |
|------------------------|--------------|--------------------------------|------|------|------|-------|
| Output Cut-off Current | $I_{O(OFF)}$ | $V_O=-30V, V_I=0$ | - | - | -10 | nA |
| DC Current Gain | G_I | $V_O=-5V, I_O=-50mA$ | 56 | - | - | |
| Output Voltage | $V_{O(ON)}$ | $I_O=-50mA, I_I=-2.5mA$ | - | -0.1 | -0.3 | V |
| Input Voltage (ON) | $V_{I(ON)}$ | $V_O=-0.3V, I_O=-20mA$ | - | - | -3.0 | V |
| Input Voltage (OFF) | $V_{I(OFF)}$ | $V_O=-5V, I_O=-0.1mA$ | -0.3 | - | - | V |
| Transition Frequency | f_T^* | $V_O=-10V, I_O=-5mA, f=100MHz$ | - | 200 | - | MHz |
| Input Current | I_I | $V_I=5V$ | - | - | -7.2 | mA |
| Input resistance | R_I | - | 0.7 | 1 | 1.3 | kΩ |
| Resistance Ratio | R_2/R_1 | - | 8 | 10 | 12 | - |

Note : * Characteristic of Transistor Only.

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