SUR548J

Epitaxial planar PNP silicon transistor

Description

• Dual chip digital transistor

Features

- Two SRA2210 chips in SOT-363 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

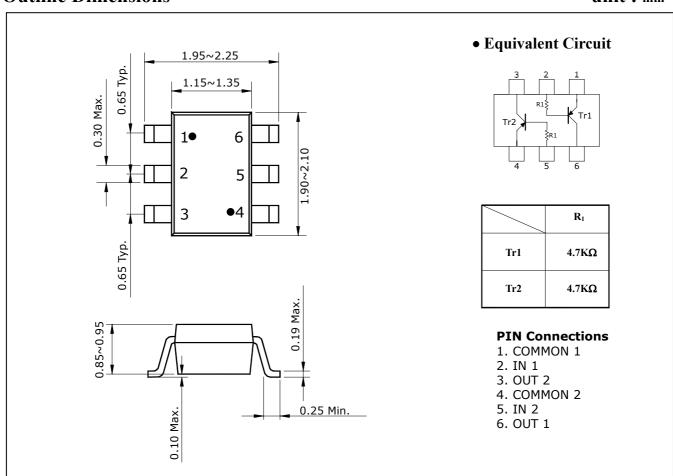
Ordering Information

| Type NO. | Marking | king Package Code | | |
|----------|---------|-------------------|--|--|
| SUR548J | ZHZ | SOT-363 | | |

Outline Dimensions

unit: mm

1



Absolute Maximum Ratings [Tr1,Tr2]

(Ta=25°C)

| Characteristic | Symbol | Rating | Unit | |
|---------------------------|-----------------------|-----------|------|--|
| Output voltage | V ₀ -50 | | V | |
| Input voltage | V _I -20, 5 | | V | |
| Output current | I_{O} | -100 | mA | |
| Power dissipation | P _D ** | 200 | mW | |
| Junction temperature | Tյ | 150 | °C | |
| Storage temperature range | T_{stg} | -55 ~ 150 | °C | |

※: Total rating

Electrical Characteristics [Tr1,Tr2]

(Ta=25°C)

2

| Characteristic | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|--------------------------------|---------------------|----------------------------------|------|-------|------|------|
| Output cut-off current | I _{O(OFF)} | $V_0 = -50V, V_I = 0$ | ı | - | -500 | nA |
| DC current gain | G_{I} | V_O =-5V, I_O =-10mA | 120 | - | - | 1 |
| Output voltage | $V_{O(ON)}$ | I_O =-10mA, I_I =-0.5mA | ı | -0.1 | -0.3 | ٧ |
| Input voltage (ON) | $V_{I(ON)}$ | $V_0 = -0.2V$, $I_0 = -5mA$ | ı | -0.8 | -1.2 | ٧ |
| Input voltage (OFF) | $V_{I(OFF)}$ | $V_0 = -5V$, $I_0 = -0.1$ mA | -0.3 | -0.55 | - | ٧ |
| Transition frequency | f _T * | V_0 =-10V, I_0 =-5mA, f=1MHz | 1 | 200 | 1 | MHz |
| Input current | $I_{\rm I}$ | V_I =-5V, I_O =0 | 1 | - | -1.8 | mA |
| Input resistor (Input to base) | R ₁ | - | 3.3 | 4.7 | 6.1 | ΚΩ |

^{* :} Characteristic of transistor only

KSD-R5S015-000

Electrical Characteristic Curves [Tr1,Tr2]

Fig. 1 I_O - V_{I(ON)}

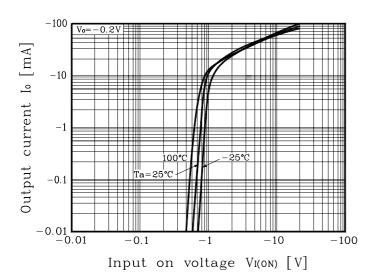


Fig. 2 I_O - $V_{I(OFF)}$

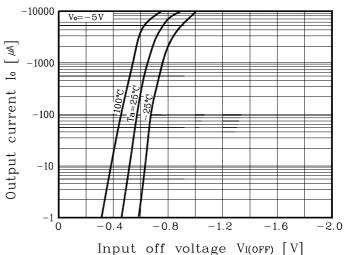
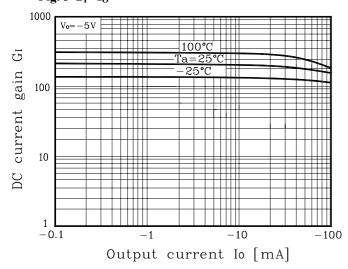


Fig. 3 G_I - I_O



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