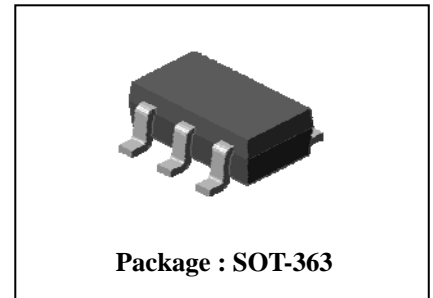


Description

- Dual chip digital transistor

Features

- Two SRA2211 chips in SOT-363 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process



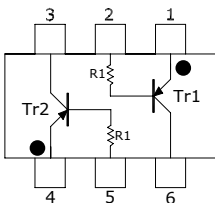
Ordering Information

| Type NO. | Marking | Package Code |
|----------|---------|--------------|
| SUR549J | SHS□ | SOT-363 |

□ : Year & Week Code

Equivalent circuit & PIN Connections

• Equivalent Circuit



| | R_1 |
|-----|--------------|
| Tr1 | 10K Ω |
| Tr2 | 10K Ω |

PIN Connections

1. COMMON 1
2. IN 1
3. OUT 2
4. COMMON 2
5. IN 2
6. OUT 1

Absolute Maximum Ratings [Tr1,Tr2]

($T_a=25^\circ\text{C}$)

| Characteristic | Symbol | Rating | Unit |
|---------------------------|-----------|-----------|------------------|
| Output voltage | V_o | -50 | V |
| Input voltage | V_i | -30, 5 | V |
| Output current | I_o | -100 | mA |
| Power dissipation | P_D^* | 200 | mW |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature range | T_{stg} | -55 ~ 150 | $^\circ\text{C}$ |

※: Total rating

Electrical Characteristics [Tr1,Tr2]

(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 | $V_O=-5V, I_O=-10mA$ | 120 | - | - | - |
| Output voltage | $V_{O(ON)}$ | $I_O=-10mA, I_I=-0.5mA$ | - | -0.1 | -0.3 | V |
| Input voltage (ON) | $V_{I(ON)}$ | $V_O=-0.2V, I_O=-5mA$ | - | -0.9 | -1.4 | V |
| Input voltage (OFF) | $V_{I(OFF)}$ | $V_O=-5V, I_O=-0.1mA$ | -0.3 | -0.55 | - | V |
| Transition frequency | f_T^* | $V_O=-10V, I_O=-5mA, f=1MHz$ | - | 200 | - | MHz |
| Input current | I_I | $V_I=-5V, I_O=0$ | - | - | -0.88 | mA |
| Input resistor (Input to base) | R_1 | - | 7 | 10 | 13 | K Ω |

* : Characteristic of transistor only

Electrical Characteristic Curves
[Tr1,Tr2]

Fig. 1 $I_o - V_{I(ON)}$

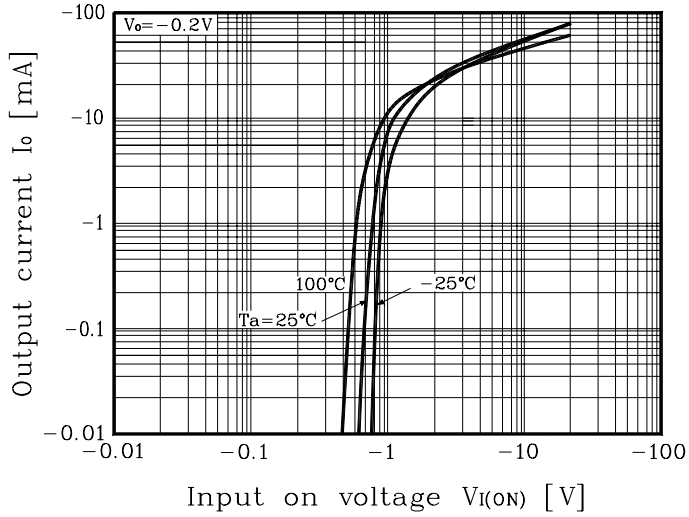


Fig. 2 $I_o - V_{I(OFF)}$

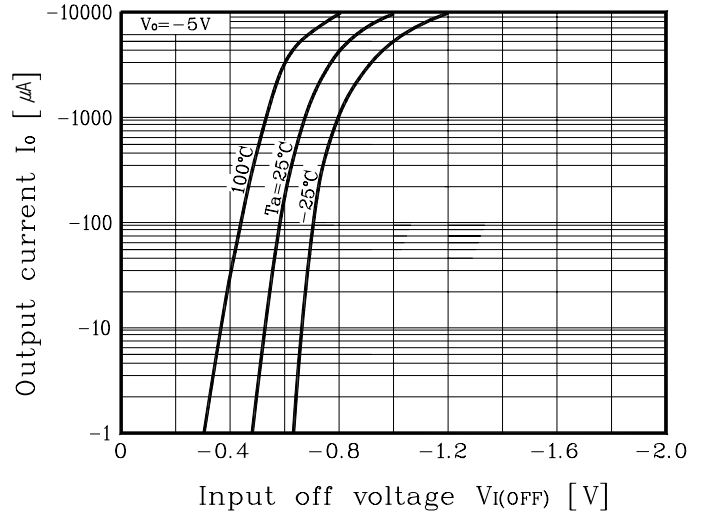
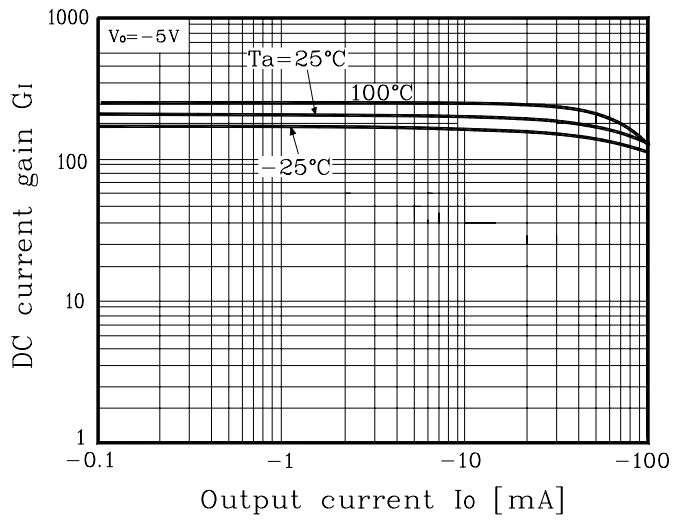
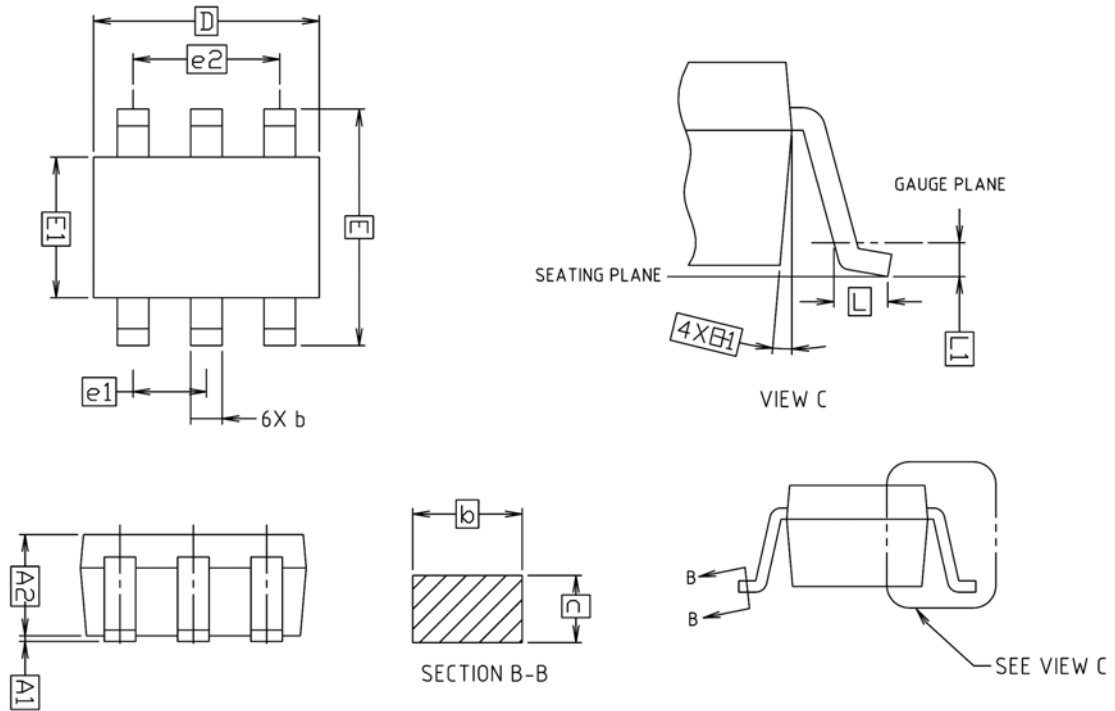


Fig. 3 $G_I - I_o$

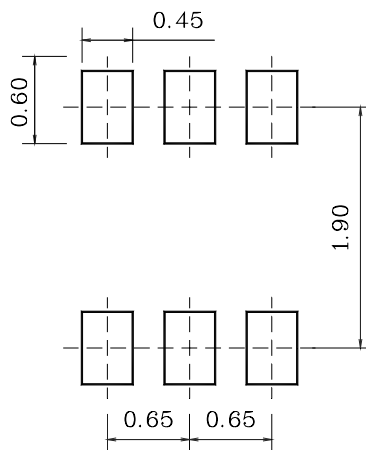


Outline Dimension



| SYMBOL | MILLIMETERS | | | NOTE |
|--------|-------------|---------|---------|------|
| | MINIMUM | NOMINAL | MAXIMUM | |
| A1 | 0.00 | - | 0.10 | |
| A2 | 0.90 | 0.95 | 1.00 | |
| b | 0.25 | - | 0.40 | |
| c | 0.10 | - | 0.25 | |
| D | 1.90 | 2.00 | 2.10 | |
| E | 1.95 | 2.10 | 2.25 | |
| E1 | 1.15 | 1.25 | 1.35 | |
| e1 | 0.65 BSC | | | |
| e2 | 1.30 BSC | | | |
| L | 0.25 | - | - | |
| L1 | 0.15 BSC | | | |

※ Recommend PCB solder land [Unit: mm]



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