

Descriptions

- Dual chip digital transistor

Features

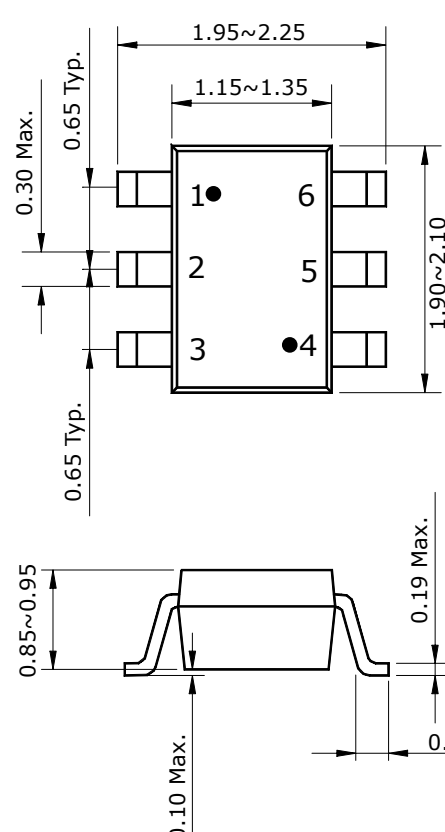
- Two SRC1201 Chips in SOT-363 Package.
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

Ordering Information

Type NO.	Marking	Package Code
SUR561J	XOX	SOT-363

Outline Dimensions

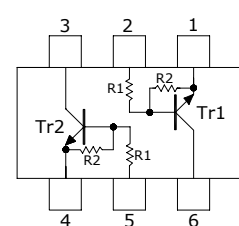
unit : mm



Top view dimensions:
 Total width: 1.95~2.25 mm
 Pin pitch: 0.65 Typ.
 Pin 1 to 3 width: 1.15~1.35 mm
 Total height: 1.90~2.10 mm
 Pin 1 to 3 height: 0.30 Max.
 Pin 4 to 6 height: 0.65 Typ.

Side view dimensions:
 Total height: 0.85~0.95 mm
 Pin height: 0.10 Max.
 Pin width: 0.19 Max.
 Pin spacing: 0.25 Min.

• Equivalent Circuit



	R ₁	R ₂
Tr1	4.7KΩ	4.7KΩ
Tr2	4.7KΩ	4.7KΩ

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]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	V_O	50	V
Input voltage	V_I	20, -10	V
Output current	I_O	100	mA
Power dissipation	P_D^*	200	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55 ~ 150	°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	$V_O=5V, I_O=10mA$	30	55	-	-
Output voltage	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.5	2.0	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
Transition frequency	f_T^*	$V_O=10V, I_O=5mA, f=1MHz$	-	200	-	MHz
Input current	I_I	$V_I=5V, I_O=0$	-	-	1.8	mA
Input resistor (Input to base)	R_1	-	3.3	4.7	6.1	K Ω
Input resistor (Base to common)	R_2	-	3.3	4.7	6.1	K Ω

*: Characteristic of transistor only

Electrical Characteristic Curves

[Tr1,Tr2]

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

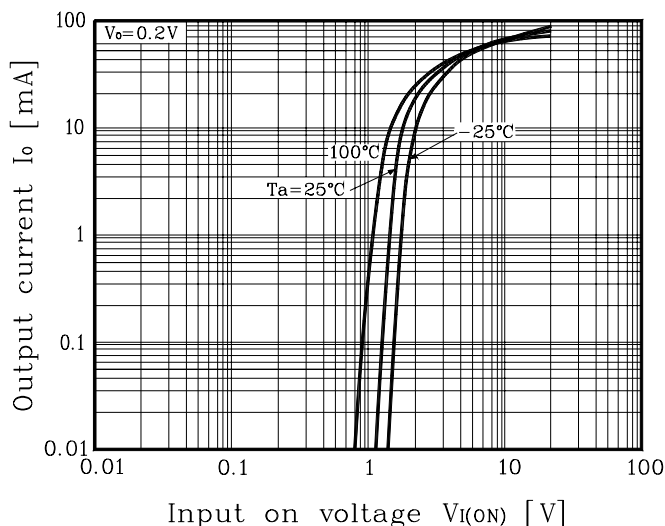


Fig. 2 $I_o - V_{I(OFF)}$

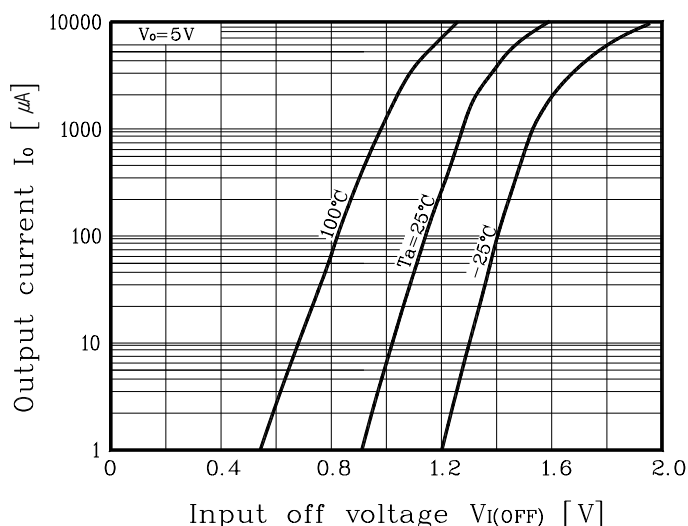
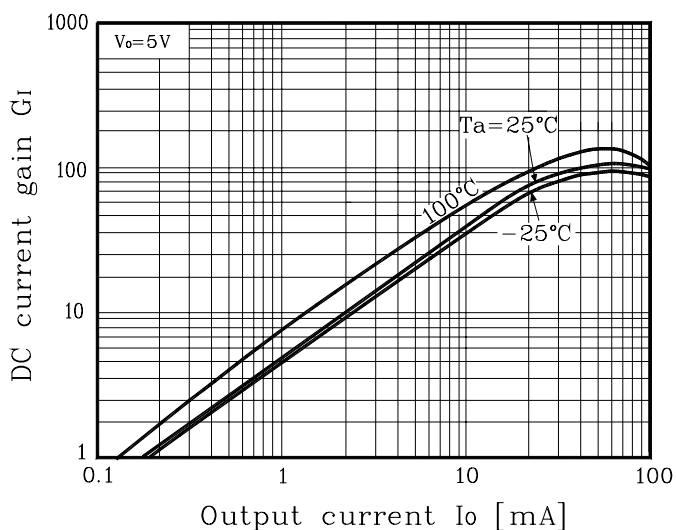


Fig. 3 $G_I - I_o$



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