

# SUR536H

#### Epitaxial planar PNP silicon transistor

### **Description**

• Dual chip digital transistor

#### **Features**

- Two SRA2210 chips in SOT-353 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

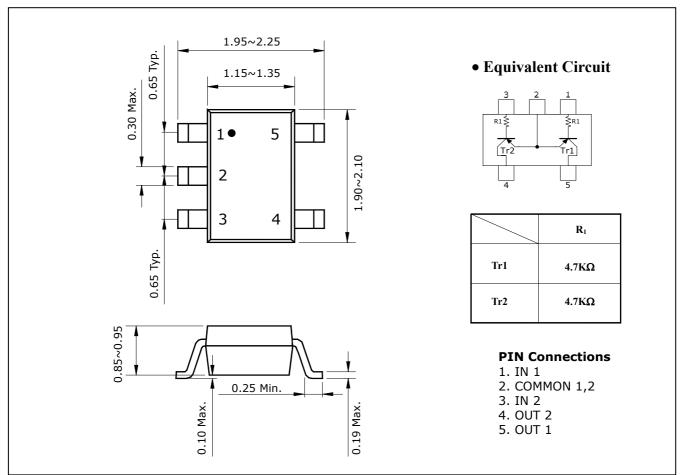
## **Ordering Information**

Type NO.	Marking	Package Code
SUR536H	36H	SOT-353

### **Outline Dimensions**



1



Absolute Maximum Ratings [Tr1,Tr2]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit	
Output voltage	Vo	-50	V	
Input voltage	V <sub>I</sub> -20, 5		V	
Output current	$I_{O}$	-100	mA	
Power dissipation	P <sub>D</sub> <sup>∗</sup>	200	mW	
Junction temperature	T <sub>J</sub>	150	°C	
Storage temperature range	$T_{stg}$	-55 ~ 150	°C	

※: Total rating

## **Electrical Characteristics** [Tr1,Tr2]

(Ta=25°C)

Characteristic	Symbol	<b>Test Condition</b>	Min.	Тур.	Max.	Unit
Output cut-off current	I <sub>O(OFF)</sub>	$V_0 = -50V, V_I = 0$	-	-	-500	nA
DC current gain	$G_{\mathrm{I}}$	$V_0 = -5V$ , $I_0 = -10$ mA	120	-	-	-
Output voltage	V <sub>O(ON)</sub>	$I_{O}$ =-10mA, $I_{I}$ =-0.5mA	-	-0.1	-0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_0 = -0.2V$ , $I_0 = -5mA$	-	-0.8	-1.2	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_0 = -5V$ , $I_0 = -0.1$ mA	-0.3	-0.55	-	V
Transition frequency	f <sub>T</sub> *	$V_0$ =-10V, $I_0$ =-5mA, f=1MHz	-	200	-	MHz
Input current	$I_{\rm I}$	$V_{I}$ =-5V, $I_{O}$ =0	-	-	-1.8	mA
Input resistor (Input to base)	$R_1$	-	3.3	4.7	6.1	ΚΩ

<sup>\* :</sup> Characteristic of transistor only

# **Electrical Characteristic Curves** [Tr1,Tr2]

Fig. 1 I<sub>O</sub> - V<sub>I(ON)</sub>

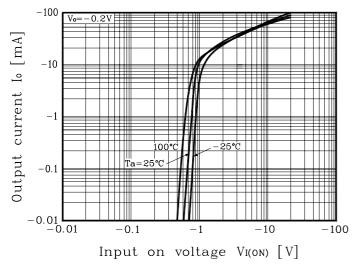


Fig. 2 I<sub>O</sub> - V<sub>I(OFF)</sub>

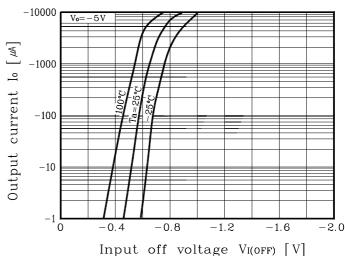
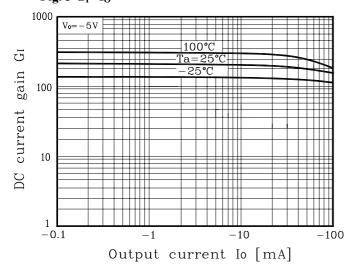


Fig. 3  $G_I$  -  $I_O$ 



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