

## Description

- Dual chip digital transistor

## Features

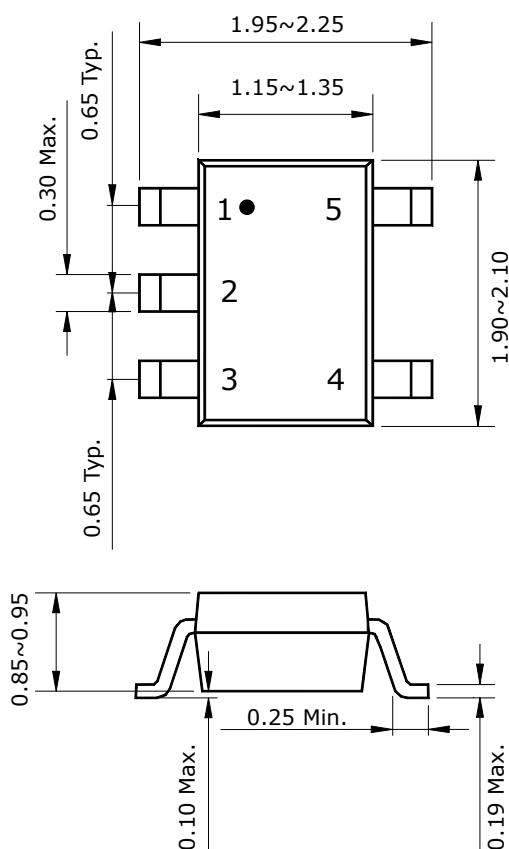
- Two SRC1203 chips in SOT-353 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

## Ordering Information

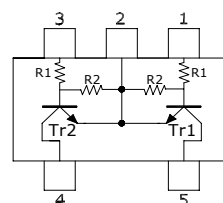
Type NO.	Marking	Package Code
SUR523H	23H	SOT-353

## Outline Dimensions

unit : mm



### • Equivalent Circuit



	R <sub>1</sub>	R <sub>2</sub>
Tr1	22KΩ	22KΩ
Tr2	22KΩ	22KΩ

### PIN Connections

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

## Absolute Maximum Ratings [Tr1,Tr2]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	$V_O$	50	V
Input voltage	$V_I$	40,-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	$G_I$	$V_O=5V, I_O=10mA$	70	120	-	-
Output voltage	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	2.1	3.0	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	$I_I$	$V_I=5V, I_O=0$	-	-	0.36	mA
Input resistor (Input to base)	$R_1$	-	15.4	22	28.6	KΩ
Input resistor (Base to common)	$R_2$	-	15.4	22	28.6	KΩ

\* : Characteristic of transistor only

## Electrical Characteristic Curves

[Tr1,Tr2]

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

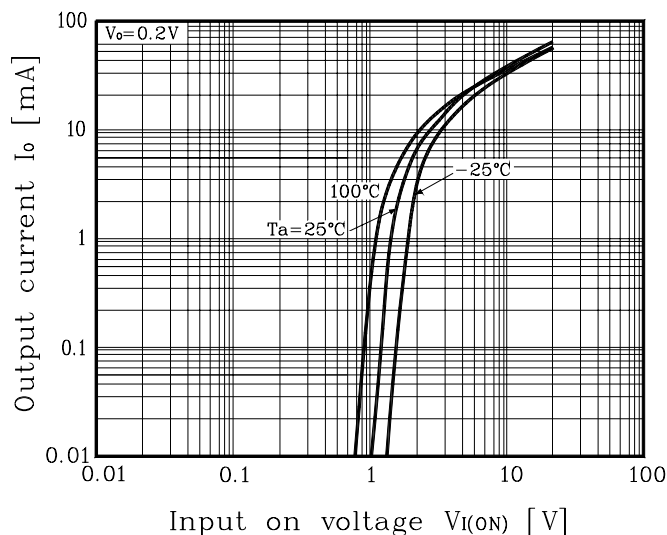


Fig. 2  $I_O - V_{I(OFF)}$

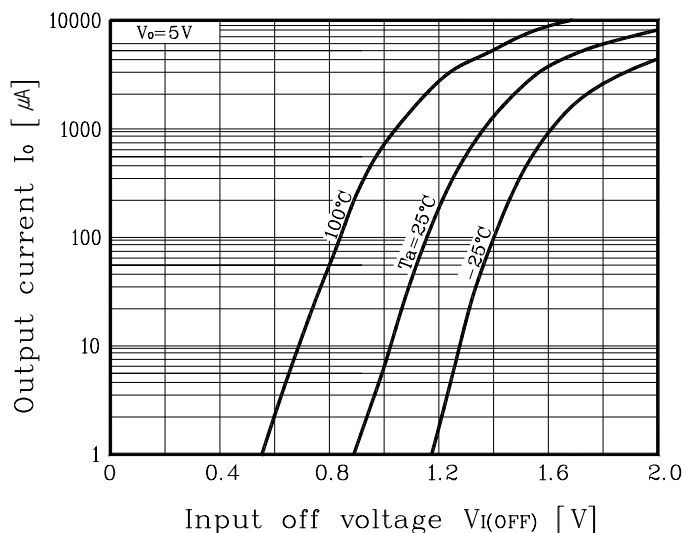
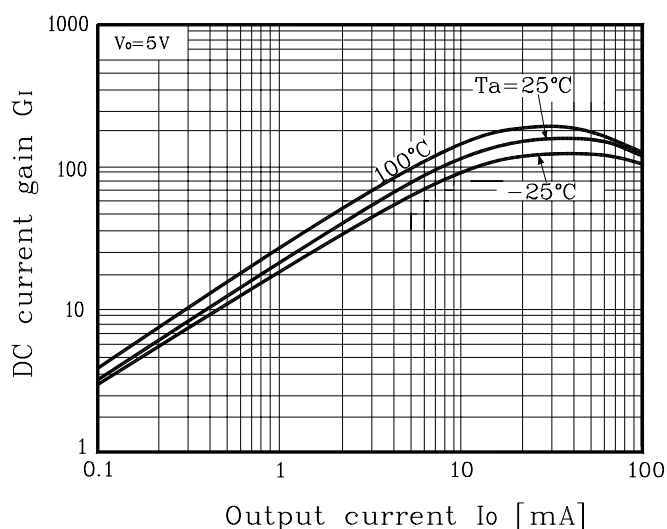


Fig. 3  $G_I - I_O$



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