

SUR523H

Epitaxial planar NPN silicon transistor

Description

• Dual chip digital transistor

Features

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

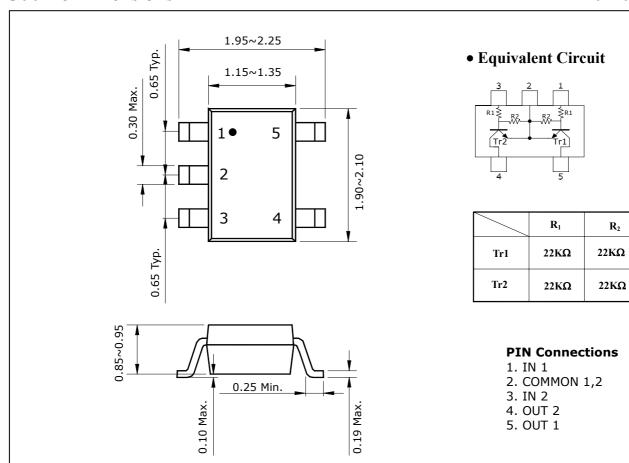
Ordering Information

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

Outline Dimensions

unit: mm

1



Absolute Maximum Ratings [Tr1,Tr2]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	Vo	50	V
Input voltage	V_{I}	40,-10	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

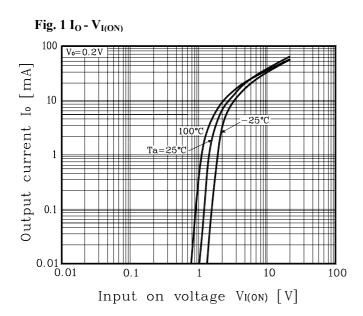
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output cut-off current	$I_{O(OFF)}$	V _O =50V, V _I =0	-	-	500	nA
DC current gain	G_{I}	V _O =5V, I _O =10mA	70	120	-	-
Output voltage	$V_{O(ON)}$	I_O =10mA, I_I =0.5mA	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	V _O =0.2V, I _O =5mA	-	2.1	3.0	V
Input voltage (OFF)	$V_{I(OFF)}$	V _O =5V, I _O =0.1mA	1.0	1.2	-	V
Transition frequency	f _T *	V_0 =10V, I_0 =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	K Ω
Input resistor (Base to common)	R_2	-	15.4	22	28.6	K Ω

^{* :} Characteristic of transistor only

KSD-R5R008-000

Electrical Characteristic Curves

[Tr1,Tr2]



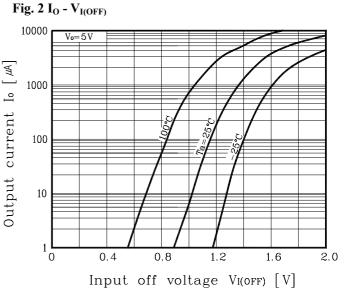
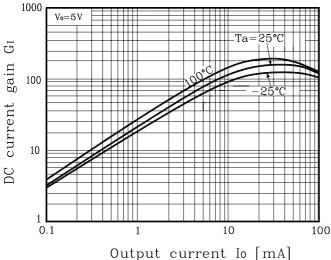


Fig. 3 G_I - I_O



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