

SUR531H

Epitaxial planar PNP silicon transistor

Description

• Dual chip digital transistor

Features

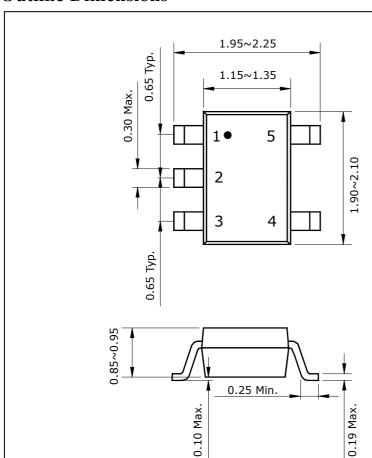
- Two SRA2204 chips in SOT-353 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

Ordering Information

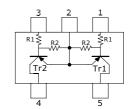
Type NO.	Marking	Package Code		
SUR531H	31H	SOT-353		

Outline Dimensions

unit: mm



• Equivalent Circuit



	R ₁	R_2
Tr1	47ΚΩ	47ΚΩ
Tr2	47ΚΩ	47ΚΩ

PIN Connections

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

KSD-R5R015-000 1

Absolute Maximum Ratings [Tr1,Tr2]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	Vo	-50	V
Input voltage	$V_{\rm I}$	-40, 10	V
Output current	I_{O}	-100	mA
Power dissipation	P _D **	200	mW
Junction temperature	T ₁	150	°C
Storage temperature range	T_{stg}	-55 ~ 150	°C

^{*:} Total rating

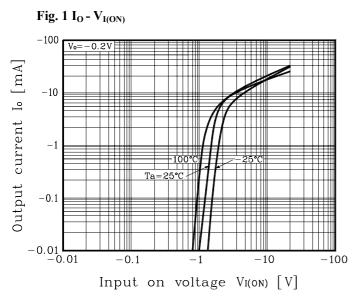
Electrical Characteristics [Tr1,Tr2]

(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	80	200	-	-
Output voltage	V _{O(ON)}	I_{O} =-10mA, I_{I} =-0.5mA	-	-0.1	-0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_0 = -0.2V$, $I_0 = -5mA$	-	-2.8	-5.0	٧
Input voltage (OFF)	$V_{I(OFF)}$	$V_0 = -5V$, $I_0 = -0.1$ mA	-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	-	-	-0.18	mA
Input resistor (Input to base)	R_1	-	33	47	61	K Ω
Input resistor (Base to common)	R ₂	-	33	47	61	K Ω

^{* :} Characteristic of transistor only

Electrical Characteristic Curves [Tr1,Tr2]



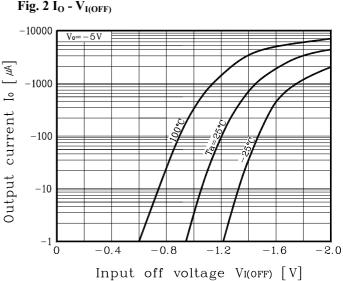


Fig. 3 G_I- I_O

1000

Vo=-5V

Ta=25°C

-25°C

Output current Io [mA]

The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.