SUR550J

Epitaxial planar PNP silicon transistor

Description

• Dual chip digital transistor

Features

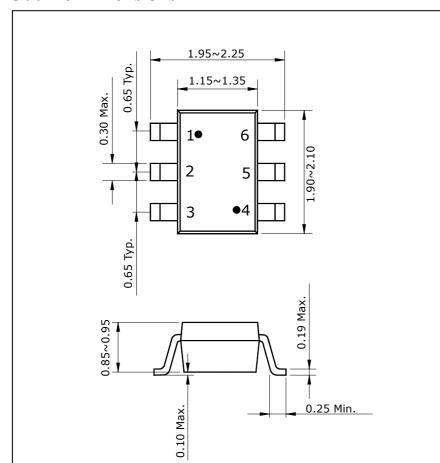
- Two SRA2207chips in SOT-363 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

Ordering Information

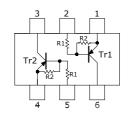
Type NO.	Marking	Package Code
SUR550J	XIX	SOT-363

Outline Dimensions

unit: mm



• Equivalent Circuit



	$\mathbf{R_1}$	R ₂
Tr1	10ΚΩ	47ΚΩ
Tr2	10ΚΩ	47ΚΩ

PIN Connections

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

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Absolute Maximum Ratings [Tr1,Tr2]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	Vo	-50	V
Input voltage	V _I	-30, 6	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.	Тур.	Max.	Unit
Output cut-off current	I _{O(OFF)}	$V_0 = -50V, V_I = 0$	-	-	-500	nA
DC current gain	G_{I}	V _O =-5V, I _O =-10mA	80	150	-	-
Output voltage	V _{O(ON)}	I_{O} =-10mA, I_{I} =-0.5mA	-	-0.1	-0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_0 = -0.2V$, $I_0 = -5mA$	-	-	-1.8	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_0 = -5V$, $I_0 = -0.1$ mA	-0.5	-	-	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	-	-	-0.88	mA
Input resistor (Input to base)	R ₁	-	7	10	13	K Ω
Input resistor (Base to common)	R ₂	-	33	47	61	K Ω

^{* :} Characteristic of transistor only

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Electrical Characteristic Curves [Tr1,Tr2]

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

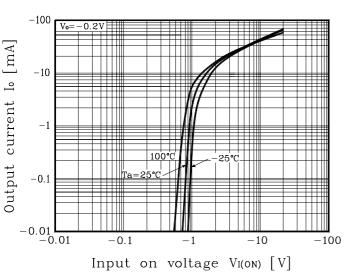


Fig. 2 I_O - V_{I(OFF)}

-10000

-1000

-1000

-1000

-1000

-1000

-1000

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-1000

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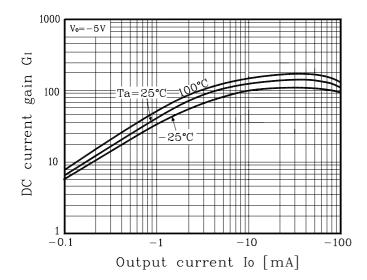
-1000

-1000

-1000

-100

Fig. 3 G₁ - I₀



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