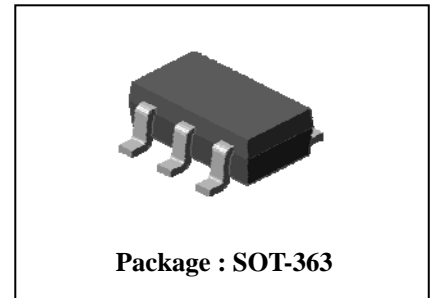


## Description

- Dual chip digital transistor

## Features

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



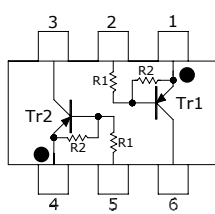
## Ordering Information

Type NO.	Marking	Package Code
SUR550J	XIX□	SOT-363

□ : Year & Week Code

## Equivalent circuit & PIN Connections

• **Equivalent Circuit**



	R <sub>1</sub>	R <sub>2</sub>
Tr1	10KΩ	47KΩ
Tr2	10KΩ	47KΩ

**PIN Connections**

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

## Absolute Maximum Ratings [ Tr1,Tr2 ]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Output voltage	V <sub>O</sub>	-50	V
Input voltage	V <sub>I</sub>	-30, 6	V
Output current	I <sub>O</sub>	-100	mA
Power dissipation	P <sub>D</sub> <sup>※</sup>	200	mW
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-55 ~ 150	°C

※: Total rating

## Electrical Characteristics [ Tr1,Tr2]

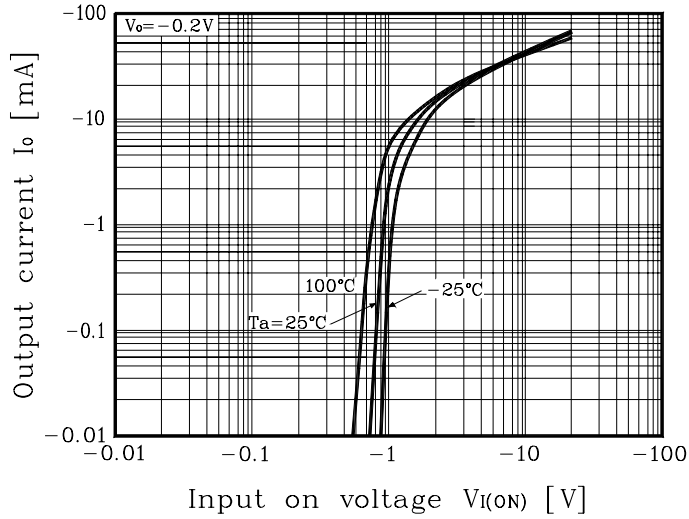
(Ta=25°C)

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	150	-	-
Output voltage	$V_{O(ON)}$	$I_O = -10mA, I_I = -0.5mA$	-	-0.1	-0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_O = -0.2V, I_O = -5mA$	-	-	-1.8	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_O = -5V, I_O = -0.1mA$	-0.5	-	-	V
Transition frequency	$f_T^*$	$V_O = -10V, I_O = -5mA, f = 1MHz$	-	200	-	MHz
Input current	$I_I$	$V_I = -5V, I_O = 0$	-	-	-0.88	mA
Input resistor (Input to base)	$R_1$	-	7	10	13	K $\Omega$
Input resistor (Base to common)	$R_2$	-	33	47	61	K $\Omega$

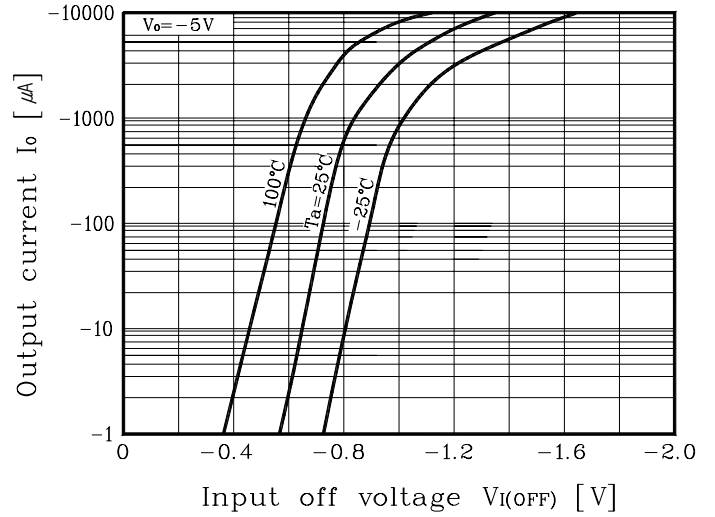
\* : Characteristic of transistor only

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

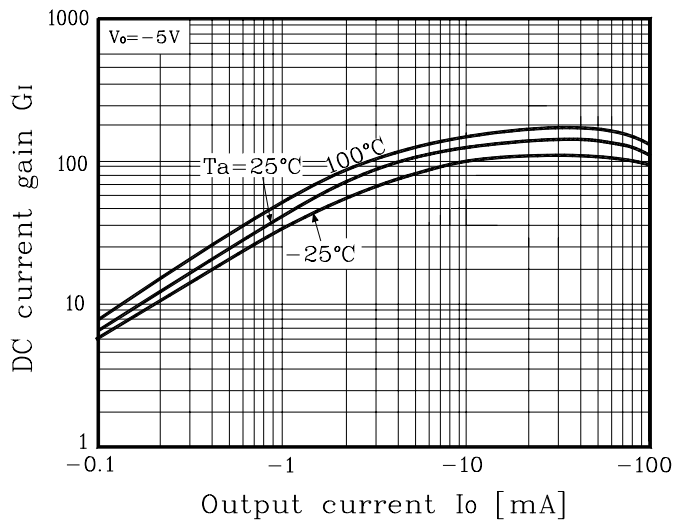
**Fig. 1  $I_o - V_{I(ON)}$**



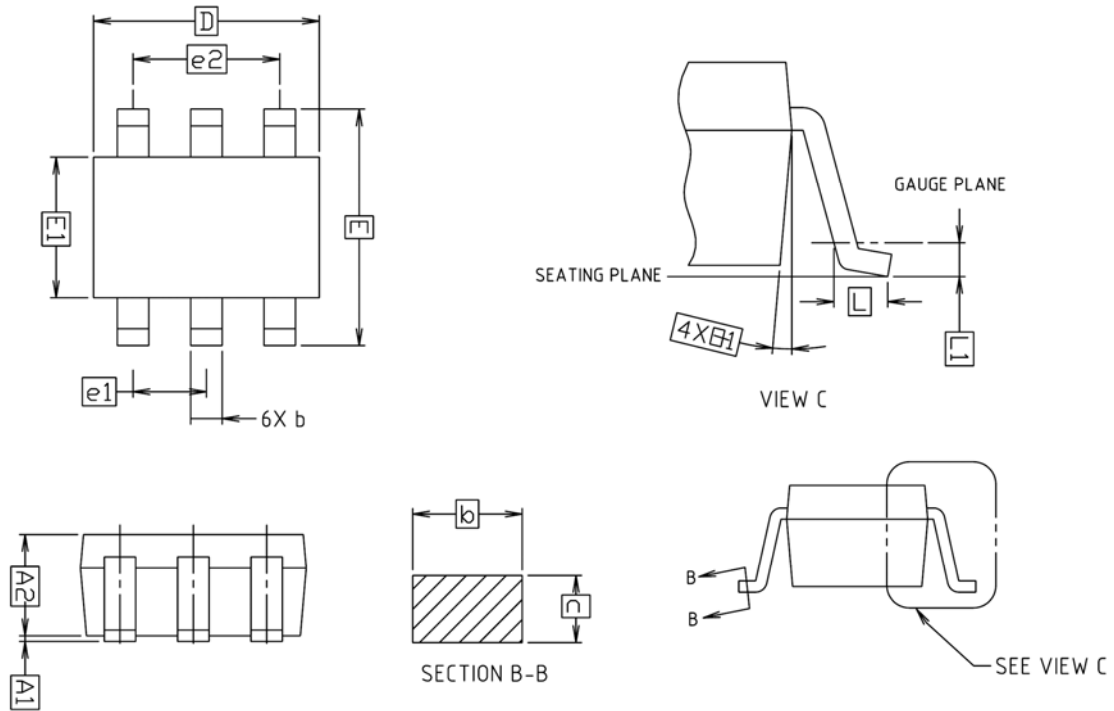
**Fig. 2  $I_o - V_{I(OFF)}$**



**Fig. 3  $G_I - I_o$**

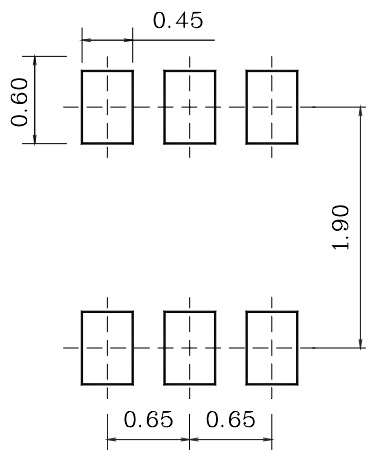


**Outline Dimension**



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A1	0.00	-	0.10	
A2	0.90	0.95	1.00	
b	0.25	-	0.40	
c	0.10	-	0.25	
D	1.90	2.00	2.10	
E	1.95	2.10	2.25	
E1	1.15	1.25	1.35	
e1	0.65 BSC			
e2	1.30 BSC			
L	0.25	-	-	
L1	0.15 BSC			

**※ Recommend PCB solder land [Unit: mm]**



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