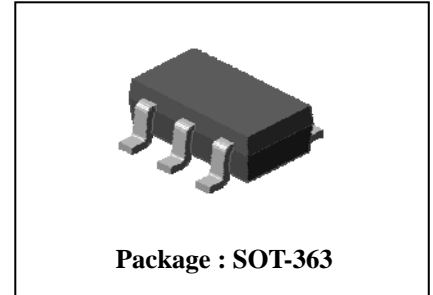


## Description

- Dual chip digital transistor

## Features

- Two SRC1210 chips in SOT-363 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

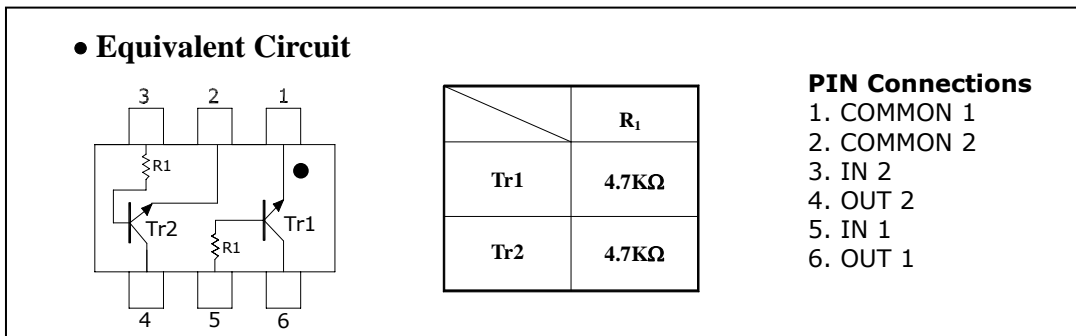


## Ordering Information

Type NO.	Marking	Package Code
SUR553J	53J□	SOT-363

□ : Year & Week Code

## Equivalent circuit & PIN Connections



## Absolute Maximum Ratings [Tr1,Tr2]

( $T_a=25^\circ\text{C}$ )

Characteristic	Symbol	Rating	Unit
Output voltage	$V_o$	50	V
Input voltage	$V_i$	20, -5	V
Output current	$I_o$	100	mA
Power dissipation	$P_D^*$	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$

※: 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	$G_I$	$V_O=5V, I_O=10mA$	120	-	-	-
Output voltage	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input voltage (ON)	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	0.8	1.2	V
Input voltage (OFF)	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.3	0.55	-	V
Transition frequency	$f_T^*$	$V_O=10V, I_O=5mA, f=1MHz$	-	200	-	MHz
Input current	$I_I$	$V_I=5V, I_O=0$	-	-	1.8	mA
Input resistor (Input to base)	$R_I$	-	3.3	4.7	6.1	K $\Omega$

\* : Characteristic of transistor only

Electrical Characteristic Curves

[Tr1, Tr2]

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

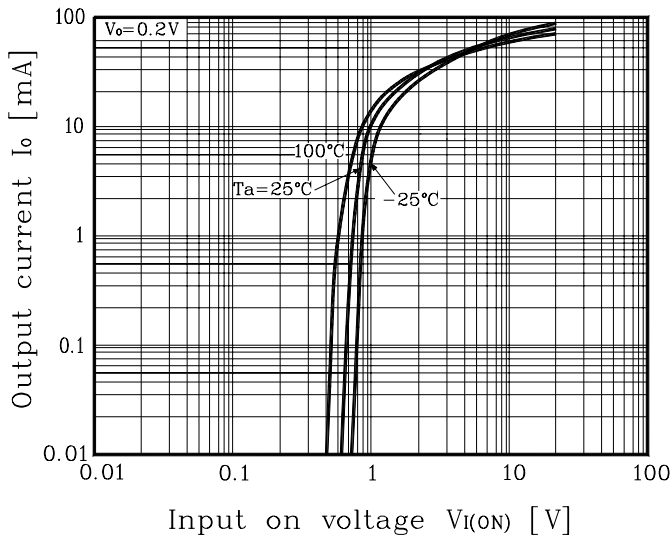


Fig. 2  $I_o - V_{I(OFF)}$

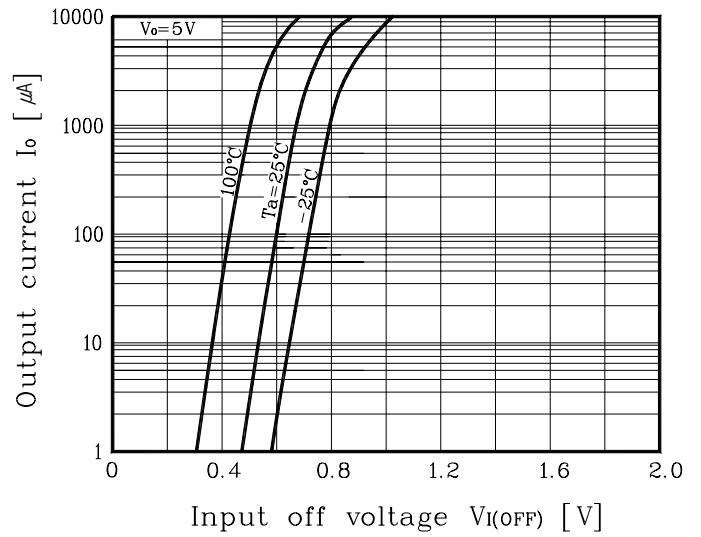
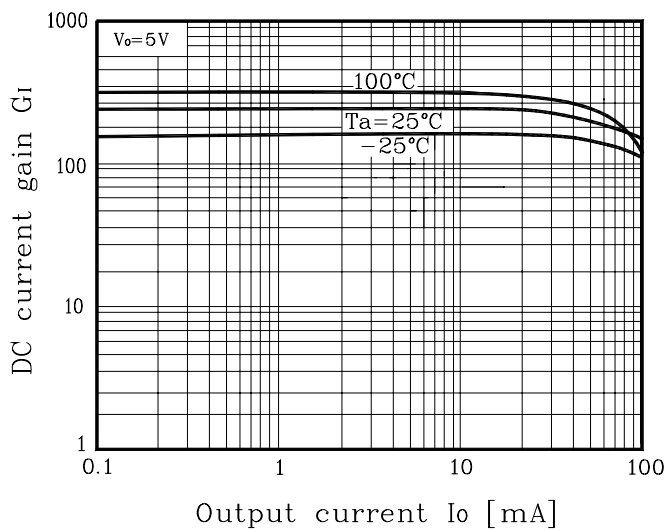
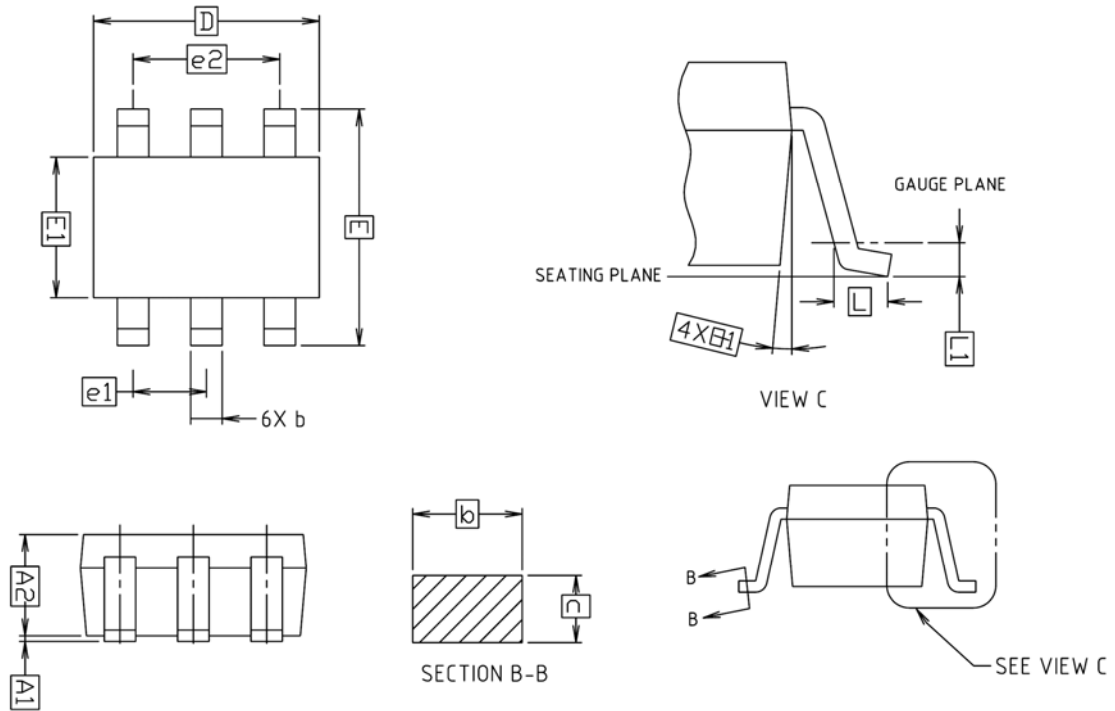


Fig. 3  $G_I - I_o$

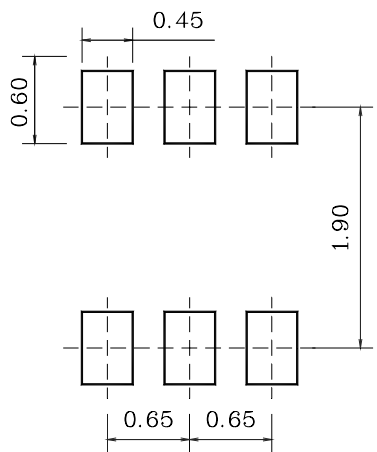


**Outline Dimension**



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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