

SUR560J

Epitaxial planar PNP silicon transistor

Descriptions

• Dual chip digital transistor

Features

- Two SRA2201 Chips in SOT-363 Package.
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process



Package: SOT-363

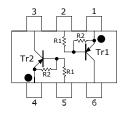
Ordering Information

Type NO.	Marking	Package Code	
SUR560J	OXO□	SOT-363	

□: Year & Week Code

Equivalent circuit & PIN Connections

• Equivalent Circuit



	R ₁	\mathbb{R}_2
Tr1	4.7ΚΩ	4.7ΚΩ
Tr2	4.7ΚΩ	4.7ΚΩ

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	Vo	-50	V
Input voltage	VI	-20, 10	V
Output current	I _O	-100	mA
Power dissipation	P _D *	200	mW
Junction temperature	Tı	150	°C
Storage temperature range	T_{stg}	-55 ~ 150	°C

*: Total rating

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Electrical Characteristics [Tr1, Tr2]

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Тур.	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	30	55	1	1
Output voltage	V _{O(ON)}	I_{O} =-10mA, I_{I} =-0.5mA	1	-0.1	-0.3	V
Input voltage (ON)	$V_{I(ON)}$	V _O =-0.2V, I _O =-5mA	-	-1.5	-2.0	V
Input voltage (OFF)	V _{I(OFF)}	V _O =-5V, I _O =-0.1mA	-1.0	-1.2	-	V
Transition frequency	f _T *	V_O =-10V, I_O =-5mA, f=1MHz	-	200	-	MHz
Input current	$I_{\rm I}$	V _I =-5V, I _O =0	-	-	-1.8	mA
Input resistor (Input to base)	R ₁	-	3.3	4.7	6.1	K Ω
Input resistor (Base to common)	R ₂	-	3.3	4.7	6.1	K Ω

^{* :} Characteristic of transistor only

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Electrical Characteristic Curves

[Tr1,Tr2]

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

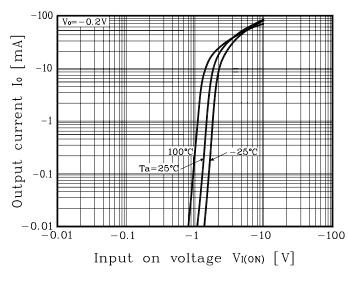


Fig. 2 $I_{\rm O}$ - $V_{\rm I(OFF)}$

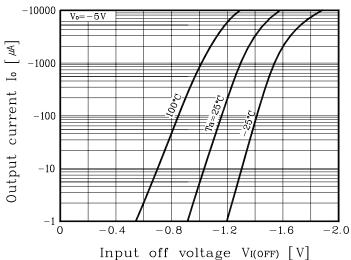
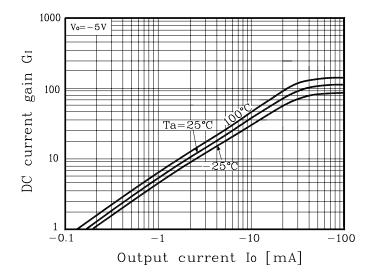
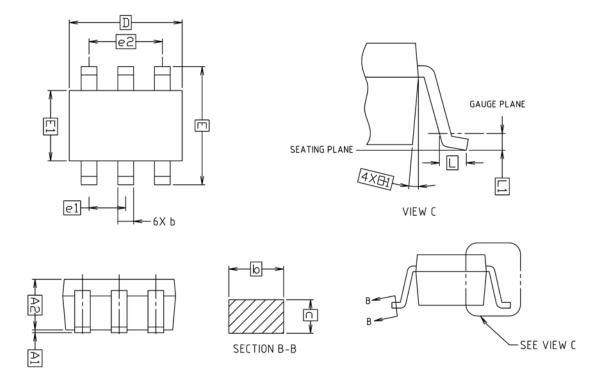


Fig. 3 G_I - I_O



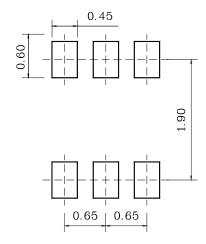
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Outline Dimension



	MILLIMETERS				
SYMBOL	MINIMUM NOMINAL MAXIMUM			NOTE	
JIIIDOL	MINIMUM	NOMINAL	MAXIMUM		
A1	0.00	_	0.10		
A2	0.90	0.95	1.00		
b	0.25	_	0.40		
С	0.10	_	0.25		
D	1.90	2.00	2.10		
Ε	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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