

Descriptions

- Digital transistor

Features

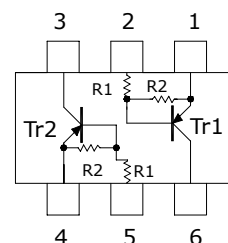
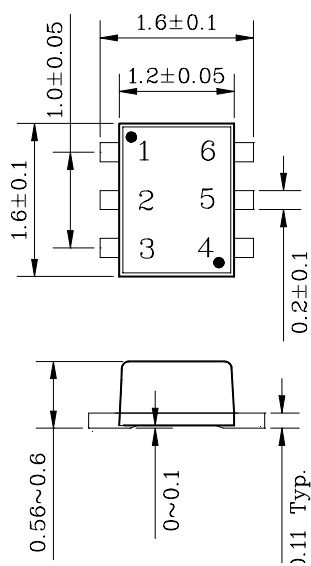
- Two SRA2204 chips in SOT-563F package
- With built-in bias resistors

Ordering Information

Type NO.	Marking	Package Code
SUR502EF	SS	SOT-563F

Outline Dimensions

unit : mm



	R ₁	R ₂
Tr1	47KΩ	47KΩ
Tr2	47KΩ	47KΩ

PIN Connections

1. Emitter 1
2. Base 1
3. Collector 2
4. Emitter 2
5. Base 2
6. Collector 1

Absolute maximum ratings (Tr1, Tr2)

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Out Voltage	V_O	-50	V
Input Voltage	V_I	-40	V
Out Current	I_O	-100	mA
Power Dissipation	P_D	100	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ 150	°C

Electrical Characteristics(Tr1, Tr2 : PNP)

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)	$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-2.8	-5.0	V
Input Voltage (OFF)	$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-1.0	-1.2	-	V
Transition Frequency	f_T^*	$V_O=-10V, I_O=-5mA$	-	200	-	MHz
Input Current	I_I	$V_I=-5V$	-	-	-0.18	mA

* : Characteristic of Transistor Only

Electrical Characteristic Curves

Tr1, Tr2 : PNP

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

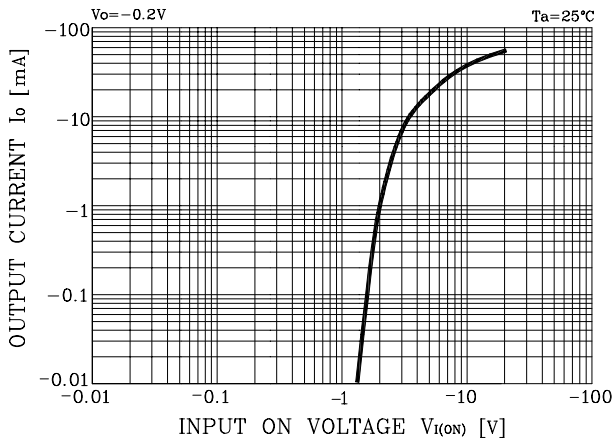


Fig. 2 $I_O - V_{I(OFF)}$

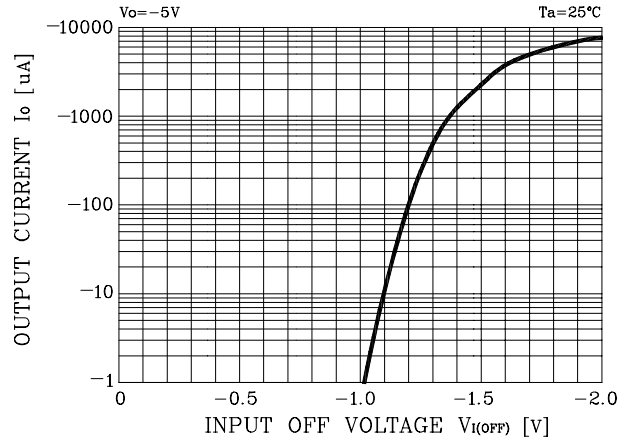


Fig. 3 $G_I - I_O$

