

Description

- Digital transistor

Features

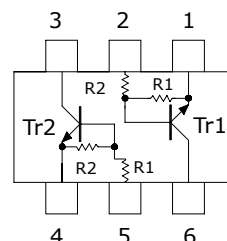
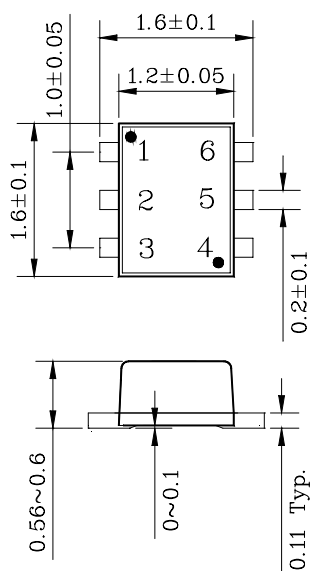
- Two SRC1206 chips in SOT-563F package
- With built-in bias resistors

Ordering Information

Type NO.	Marking	Package Code
SUR503EF	HH	SOT-563F

Outline Dimensions

unit : mm



	R ₁	R ₂
Tr1	4.7KΩ	47KΩ
Tr2	4.7KΩ	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	20	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)	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	0.9	1.3	V
Input Voltage (OFF)	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	0.5	0.65	-	V
Transition Frequency	f_T^*	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	I_I	$V_I=5V$	-	-	1.8	mA

* : Characteristic of Transistor Only

Electrical Characteristic Curves

Tr1, Tr2 : NPN

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

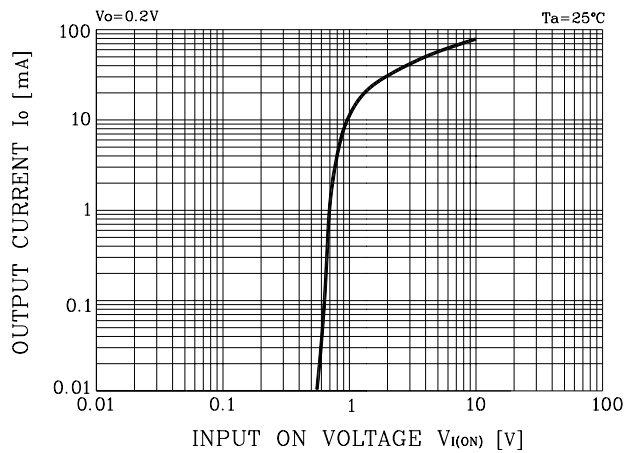


Fig. 2 $I_O - V_{I(OFF)}$

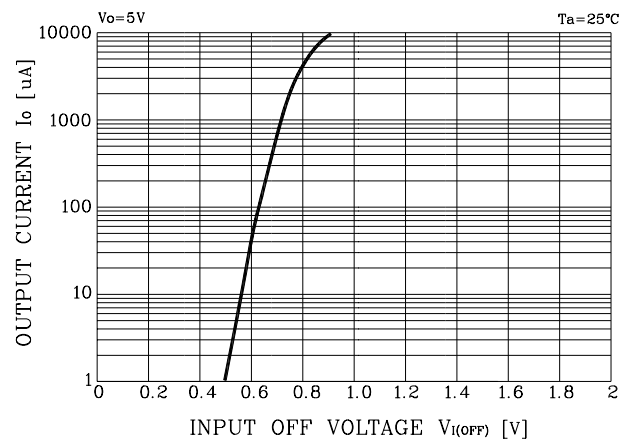


Fig. 3 $G_I - I_O$

