

## Description

- General Purpose Transistor

## Features

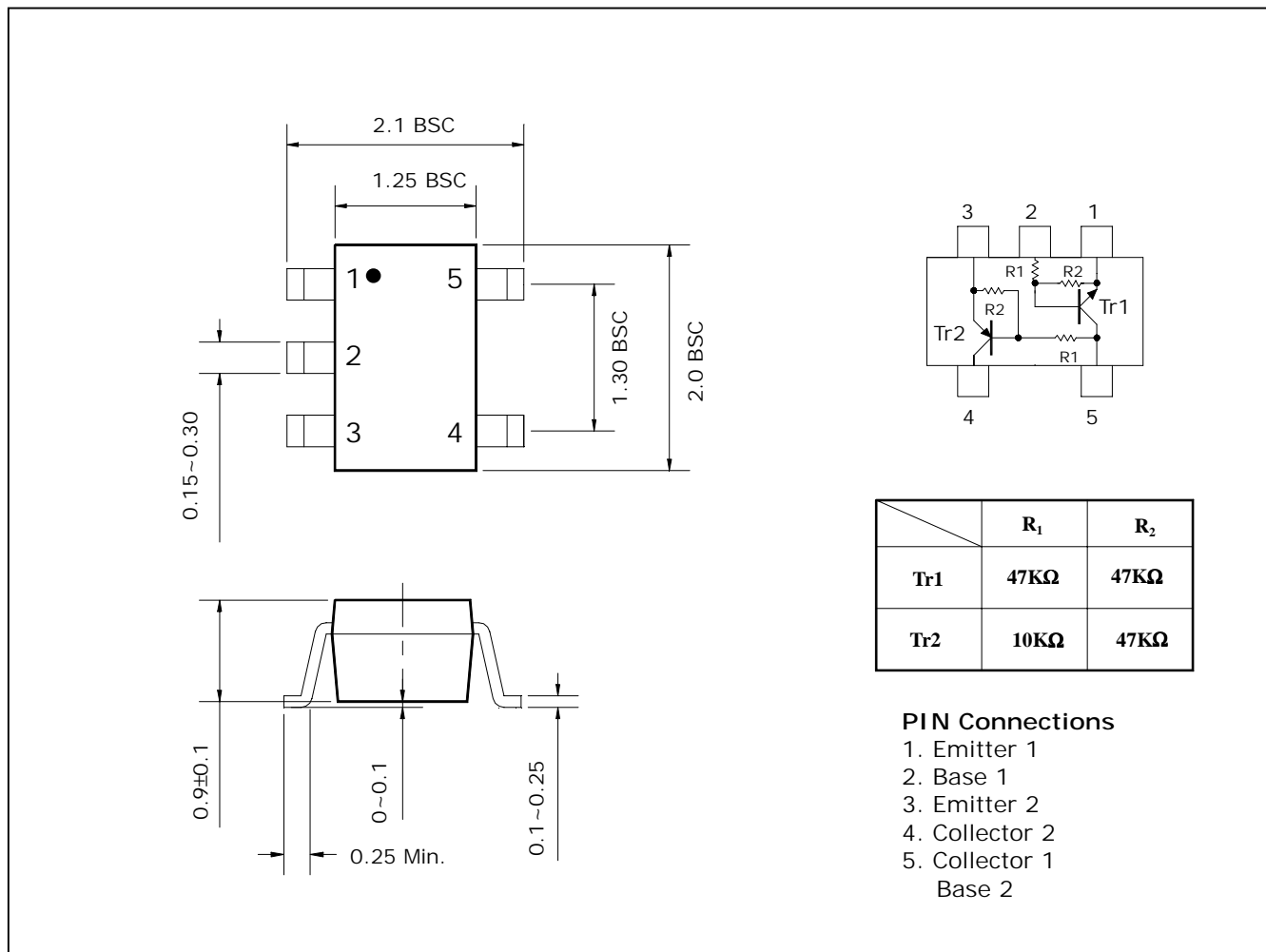
- Both SRC1204 chip and SRA2207 chip in SOT-353 package
- With Built-in Bias Resistors

## Ordering Information

Type NO.	Marking	Package Code
SUR496H	X7	SOT-353

## Outline Dimensions

unit : mm



## Absolute maximum ratings (Tr1,Tr2)

(Ta=25°C)

Characteristic	Symbol	Ratings		Unit
		Tr1	Tr2	
Out Voltage	$V_o$	50	-50	V
Input Voltage	$V_i$	40	-30	V
Out Current	$I_o$	100	-100	mA
Power Dissipation	$P_D$	150		mW
Junction Temperature	$T_J$	150		°C
Storage Temperature	$T_{STG}$	-55 ~ 150		°C

## Electrical Characteristics (Tr1 : NPN)

(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 Characteristics (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	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	$f_T^*$	$V_o=-10V, I_o=-5mA$	-	200	-	MHz
Input Current	$I_i$	$V_i=-5V$	-	-	-0.88	mA

\* : Characteristic of Transistor Only

Electrical Characteristic Curves

Tr1 : NPN

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

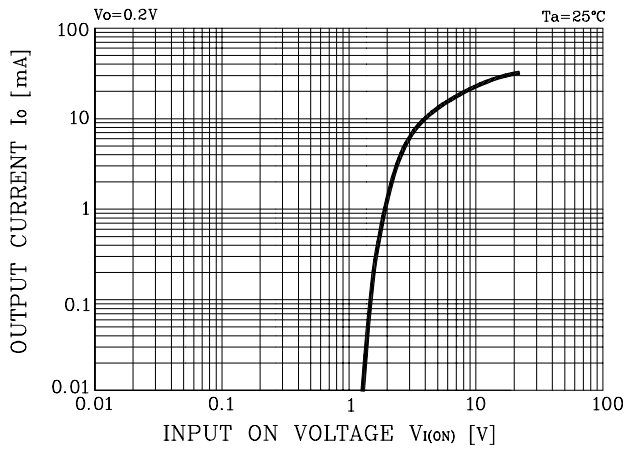


Fig. 2  $I_O - V_{I(OFF)}$

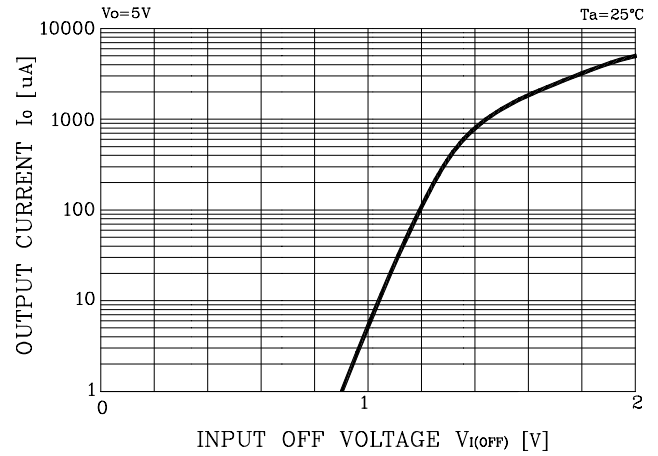
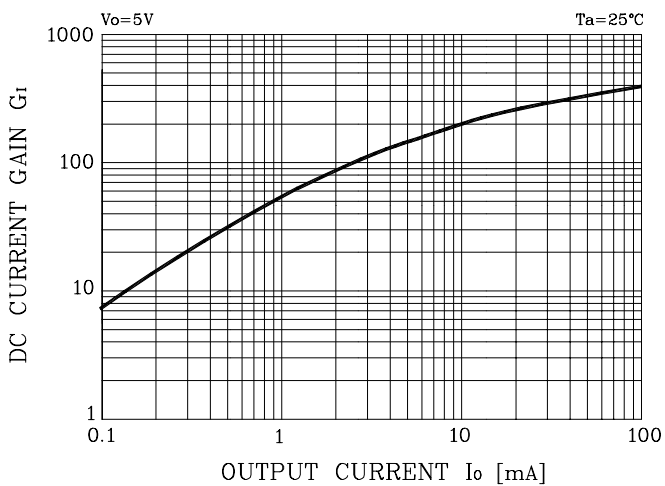


Fig. 3  $G_I - I_O$



Tr2 : PNP

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

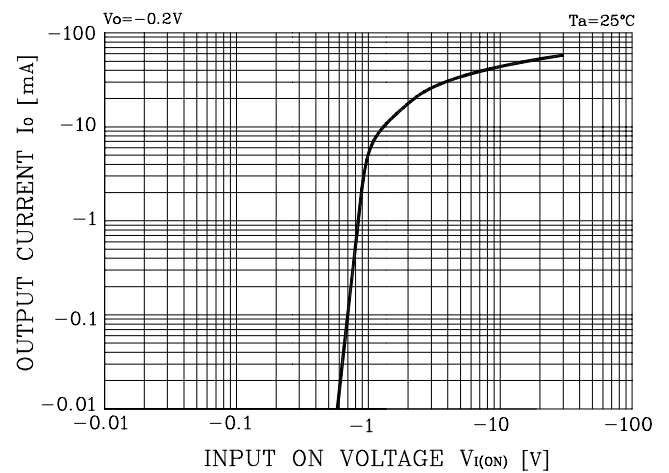


Fig. 2  $I_O - V_{I(OFF)}$

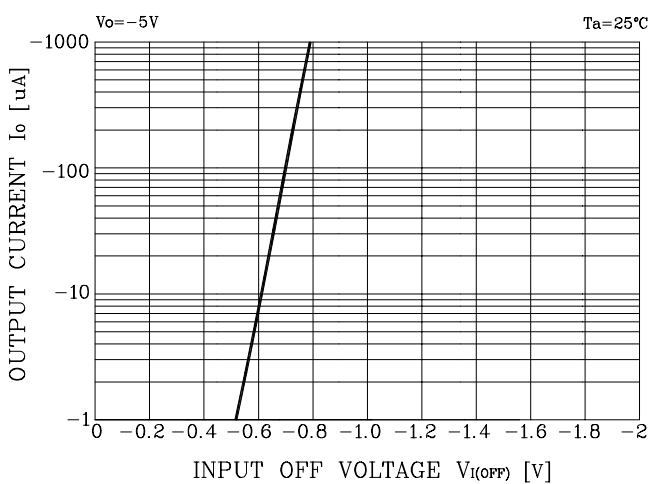


Fig. 3  $G_I - I_O$

