AUK Semiconductor

SUR499H

Epitaxial Planar PNP Transistor

Descriptions

- General purpose application
- Two SRA2205 chips in SOT-353 package

Features

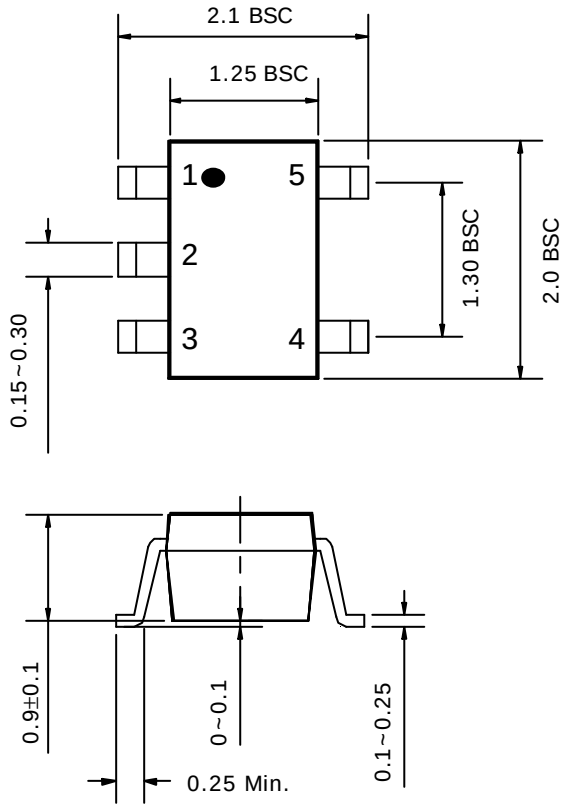
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

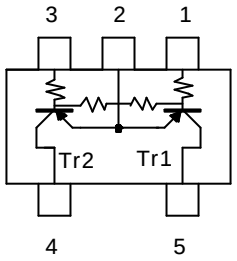
Ordering Information

Type NO.	Marking	Package Code
SUR499H	Y1	SOT-353

Outline Dimensions

unit : mm





	R_1	R_2
Tr1	2.2KW	47KW
Tr2	2.2KW	47KW

PIN Connections
1. Base 1
2. Emitter 1,2
3. Base 2
4. Collector 2
5. Collector 1

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Output voltage	V_O	-50	V
Input voltage	V_I	-12	V
Output current	I_O	-100	mA
Power dissipation	P_D	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~150	°C

Electrical Characteristics

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output out-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=-10m, I_I=-0.5mA	-	-0.1	-0.3	V
Input voltage(ON)	$V_{I(ON)}$	V_O=-0.2V, I_O=-5mA	-	-	-1.1	V
Input voltage(OFF)	$V_{I(OFF)}$	V_O=-5V, I_O=-0.1mA	-0.4	-	-	V
Transistor frequency	f_T^*	V_O=-10V, I_O=-5mA	-	200	-	MHz
Input current	I_I	V_I=-5V	-	-	-3.6	mA

* : Characteristic of transistor only

Electrical Characteristic Curves

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

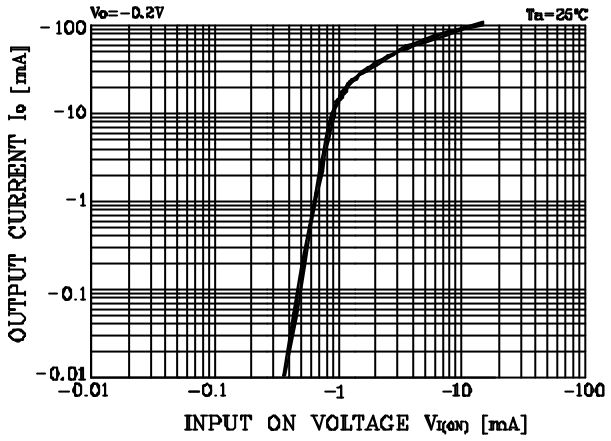


Fig. 2 I_O - $V_{I(OFF)}$

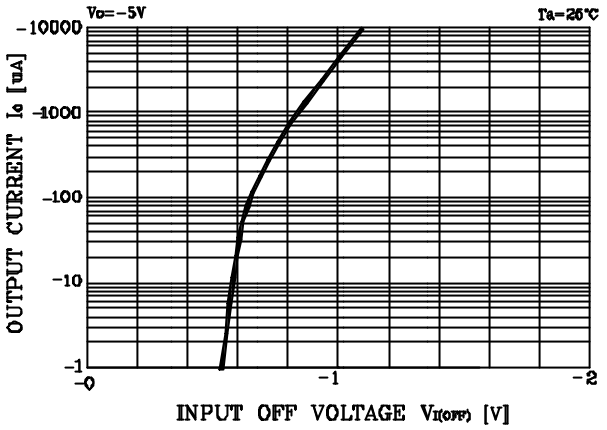


Fig. 3 G_I - I_O