



SUR542EF

Epitaxial Planar Type NPN Silicon Transistor

Descriptions

- Digital transistor

Features

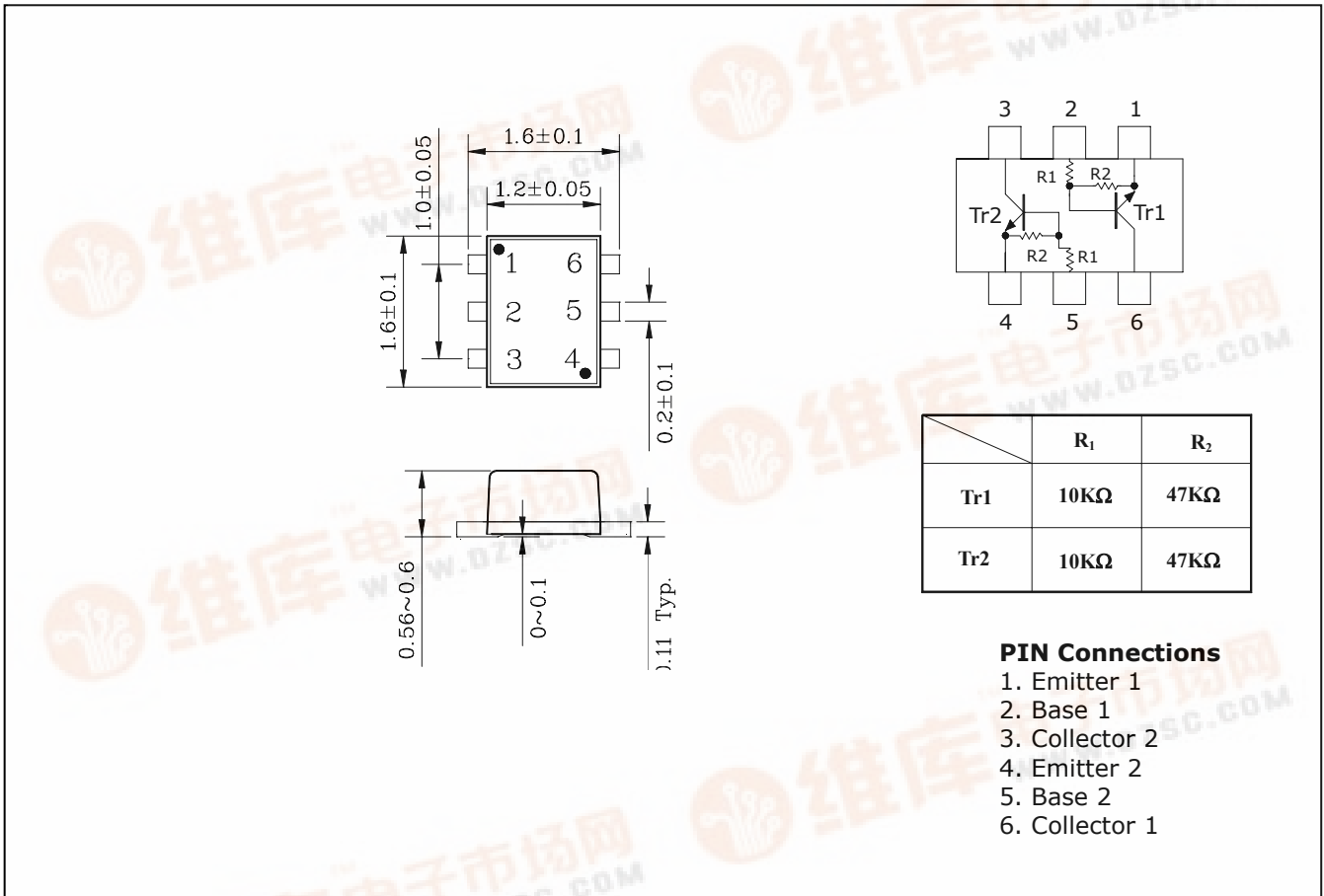
- Two SRC1207 chips in SOT-563F package
- With built-in bias resistors

Ordering Information

Type NO.	Marking	Package Code
SUR542EF	SK	SOT-563F

Outline Dimensions

unit : mm



SUR542EF

Absolute maximum ratings (Tr1, Tr2)

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Out Voltage	V _O	50	V
Input Voltage	V _I	30	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	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, Tr2 : NPN

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

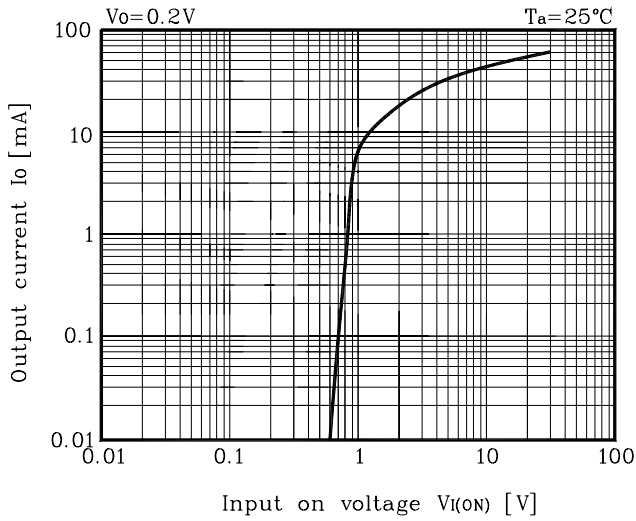


Fig. 2 $I_O - V_{I(OFF)}$

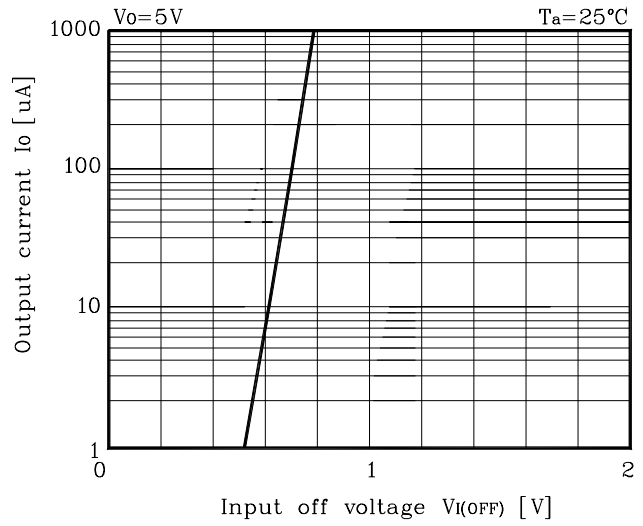
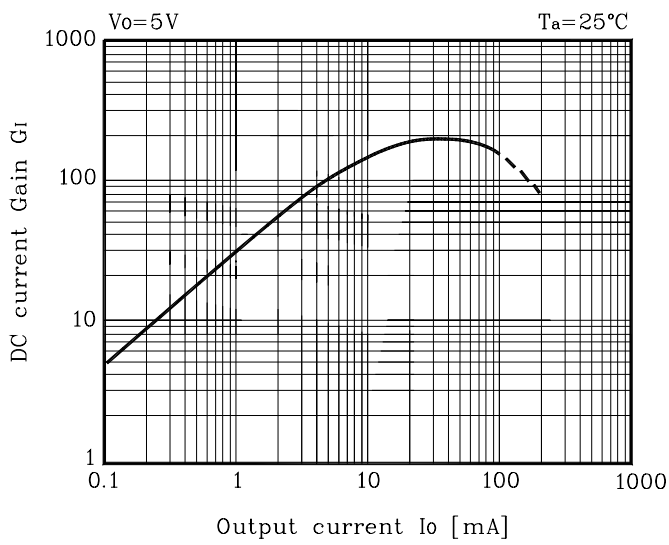


Fig. 3 $G_I - I_O$



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