

SUR519J

Epitaxial planar NPN silicon transistor

Description

• Dual chip digital transistor

Features

- Two SRC1207 chips in SOT-363 package
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process

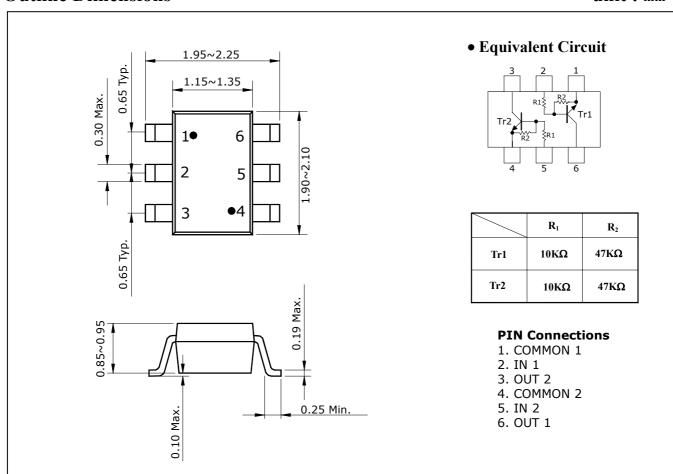
Ordering Information

Type NO.	Marking	Package Code		
SUR519J	S	SOT-363		

Outline Dimensions



1



Absolute Maximum Ratings [Tr1, Tr2]

(Ta=25°C)

Characteristic	Symbol	Rating	Unit	
Output voltage	Vo	50	V	
Input voltage	V_{I}	V _I 30,-6		
Output current	I _O	100	mA	
Power dissipation	P _D **	200	mW	
Junction temperature	Τ _J	150	°C	
Storage temperature range	T_{stg}	-55 ~ 150	°C	

^{*:} Total rating

Electrical Characteristics [Tr1, Tr2]

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Output cut-off current	I _{O(OFF)}	$V_0 = 50V, V_I = 0$	-	-	500	nA
DC current gain	G_{I}	V _O =5V, I _O =10mA	80	150	-	-
Output voltage	$V_{O(ON)}$	$I_O=10$ mA, $I_I=0.5$ mA	-	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^*	$V_0=10V$, $I_0=5$ mA, $f=1$ MHz	-	200	-	MHz
Input current	$I_{\rm I}$	$V_I=5V$, $I_O=0$	-	-	0.88	mA
Input resistor (Input to base)	R_1	-	7	10	13	K Ω
Input resistor (Base to common)	R ₂	-	33	47	61	K Ω

^{* :} Characteristic of transistor only

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Electrical Characteristic Curves

[Tr1, Tr2]

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

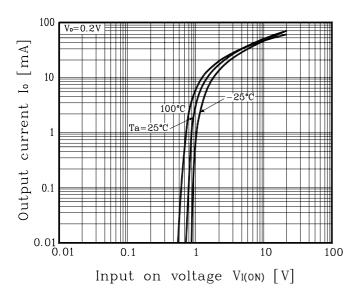


Fig. 2 I_O - V_{I(OFF)}

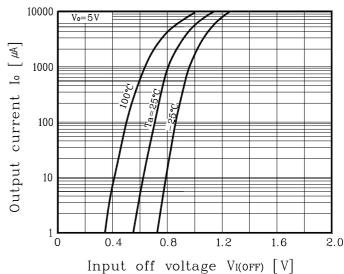
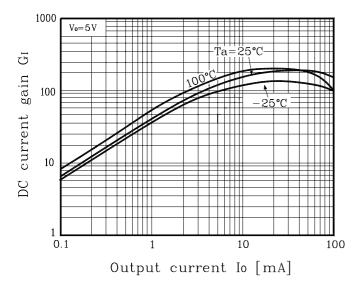


Fig. 3 G_I-I_O



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