

unit : mm

### Descriptions

- Switching application
- Interface circuit and driver circuit application

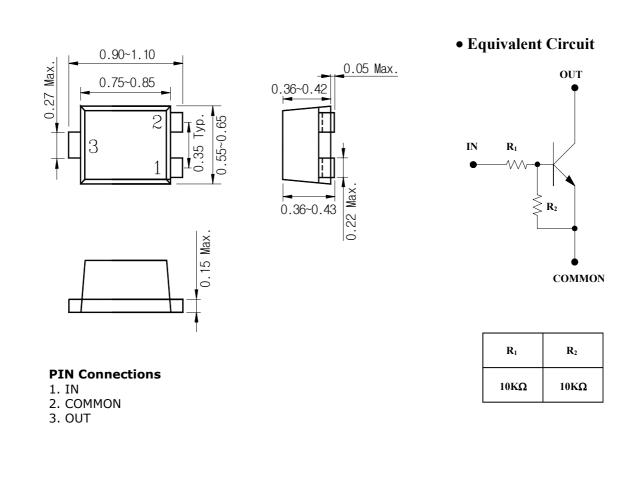
#### Features

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary pair with NT354

### **Ordering Information**

Type NO. Marking		Package Code	
NT353	В	SOT-923	

## **Outline Dimensions**



# NT353

### Absolute Maximum Ratings

Absolute Maximum Ratings			(Ta=25°C)		
Characteristic	Symbol	Rating	Unit		
Output voltage	Vo	20	V		
Input voltage	VI	15,-10	V		
Output current	I <sub>O</sub>	50	mA		
Power dissipation	P <sub>D</sub>	50	mW		
Junction temperature	Tյ	150	°C		
Storage temperature range	T <sub>stg</sub>	-55 ~ 150	°C		

## **Electrical Characteristics**

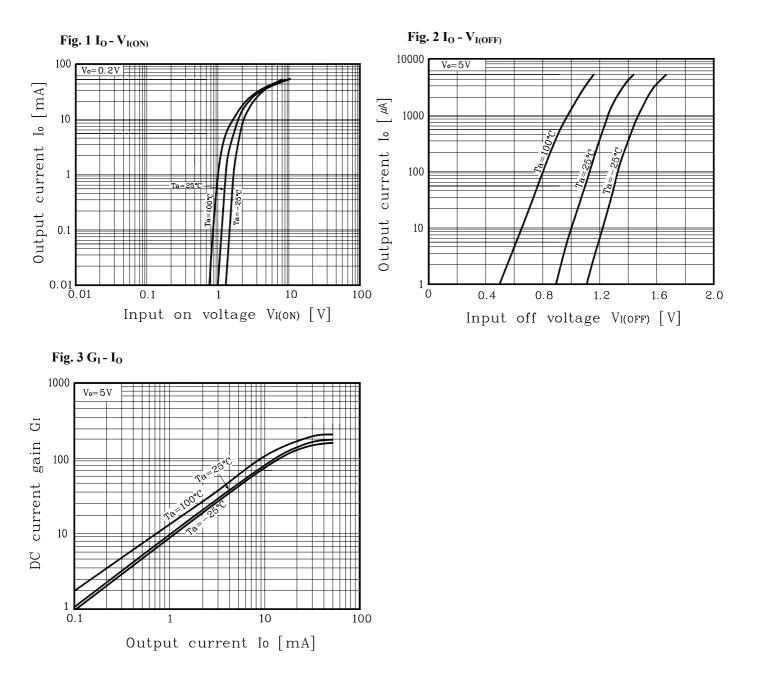
(Ta=25°C)

						)
Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Output cut-off current	$I_{O(OFF)}$	V <sub>0</sub> =20V, V <sub>I</sub> =0	-	-	500	nA
DC current gain	GI	V <sub>0</sub> =5V, I <sub>0</sub> =10mA	60	-	-	-
Output voltage	V <sub>O(ON)</sub>	I <sub>0</sub> =5mA, I <sub>I</sub> =0.25mA	-	-	0.15	V
Input voltage (ON)	V <sub>I(ON)</sub>	V <sub>0</sub> =0.2V, I <sub>0</sub> =5mA	-	1.8	2.4	V
Input voltage (OFF)	$V_{I(OFF)}$	V <sub>0</sub> =5V, I <sub>0</sub> =0.1mA	1.0	1.2	-	V
Transition frequency	$f_{T}^{*}$	V <sub>0</sub> =10V, I <sub>0</sub> =5mA	-	200	-	MHz
Input current	II	V <sub>I</sub> =5V, I <sub>O</sub> =0	-	-	0.88	mA
Input resistor (Input to base)	R <sub>1</sub>	-	7	10	13	KΩ
Input resistor (Base to common)	R <sub>2</sub>	-	7	10	13	KΩ

\* : Characteristic of transistor only

## NT353

### **Electrical Characteristic Curves**



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