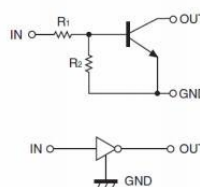


### FEATURES

- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- Surface mount package ideally Suited for Automatic Insertion

### Equivalent Circuit



### SOT-723



**MARKING: 22**

1. IN 2. GND 3. OUT

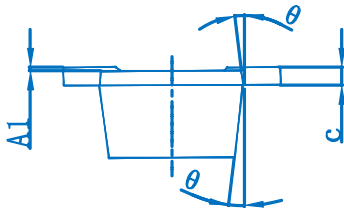
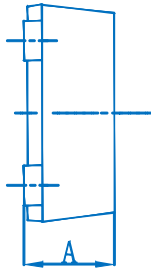
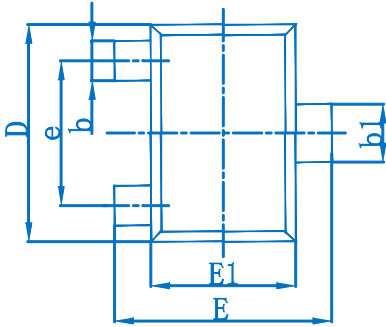
### MAXIMUM RATINGS(Ta=25 °C unless otherwise noted)

Symbol	Parameter	Limits	Unit
V <sub>CC</sub>	Supply Voltage	50	V
V <sub>IN</sub>	Input Voltage	-10~+12	V
I <sub>O</sub>	Output Current	100	mA
P <sub>D</sub>	Power Dissipation	100	mW
T <sub>J</sub> , T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55~+150	°C

### ELECTRICAL CHARACTERISTICS (Ta=25 °C unless otherwise specified)

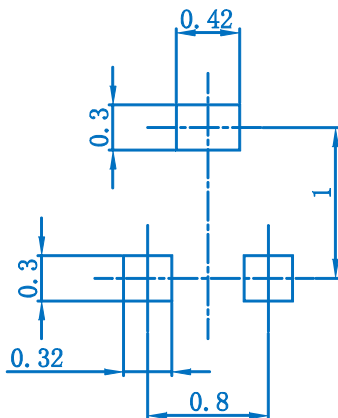
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Input voltage	V <sub>I(off)</sub>	V <sub>CC</sub> =5V, I <sub>O</sub> =100μA	0.5			V
	V <sub>I(on)</sub>	V <sub>O</sub> =0.3V, I <sub>O</sub> =20mA			3	V
Output voltage	V <sub>O(on)</sub>	I <sub>O</sub> /I <sub>I</sub> =10mA/0.5mA			0.3	V
Input current	I <sub>I</sub>	V <sub>I</sub> =5V			3.8	mA
Output current	I <sub>O(off)</sub>	V <sub>CC</sub> =50V, V <sub>I</sub> =0			0.5	μA
DC current gain	G <sub>I</sub>	V <sub>O</sub> =5V, I <sub>O</sub> =20mA	20			
Input resistance	R <sub>1</sub>		1.54	2.2	2.86	kΩ
Resistance ratio	R <sub>2</sub> /R <sub>1</sub>		0.8	1	1.2	
Transition frequency	f <sub>T</sub>	V <sub>O</sub> =10V, I <sub>O</sub> =5mA, f=100MHz		250		MHz

**SOT-723 Package Outline Dimensions**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.430	0.500	0.017	0.020
A1	0.000	0.050	0.000	0.002
b	0.170	0.270	0.007	0.011
b1	0.270	0.370	0.011	0.015
c	0.080	0.150	0.003	0.006
D	1.150	1.250	0.045	0.049
E	1.150	1.250	0.045	0.049
E1	0.750	0.850	0.030	0.033
e	0.800TYP.		0.031TYP.	
θ	7° REF.		7° REF.	

**SOT-723 Suggested Pad Layout**



**Note:**  
 1. Controlling dimension: in millimeters.  
 2. General tolerance: ± 0.05mm.  
 3. The pad layout is for reference purposes only.