



# Features

- Built-In Bias Resistors Enable the Configuration of an Inverter Circuit Without Connecting External Input Resistors
- The Bias Resistors Consist of Thin-Film Resistors With Complete Isolation to Allow Negative Biasing of the Input. They Also Have the Advantage of Almost Completely Eliminating Parasitic Effects
- Only the On/Off Conditions Need to Be Set For Operation, Making Device Design Easy
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

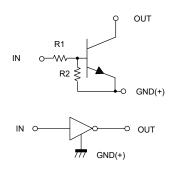
			<b>I</b>			
Parameter	Symbol	Min	Тур	Max	Unit	
Supply Voltage	V <sub>cc</sub>		50		V	
Input Voltage	V <sub>IN</sub>	-10		40	V	
Output Current	I <sub>o</sub>		30		mA	
	I <sub>c(Max)</sub>		100		mA	
Power Dissipation	P <sub>D</sub>		200		mW	
Junction Temperature	TJ			150	°C	
Storage Temperature	T <sub>stg</sub>	-55		150	°C	

# Maximum Ratings @ 25°C Unless Otherwise Specified

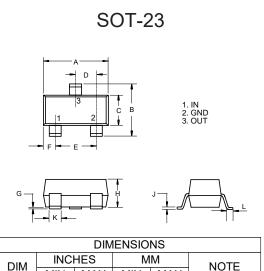
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

## Device Marking: 25

### Internal Structure







DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.110	0.120	2.80	3.04	
В	0.083	0.104	2.10	2.64	
С	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
Н	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

# Suggested Solder Pad Layout

### Rev.3-4-08012020



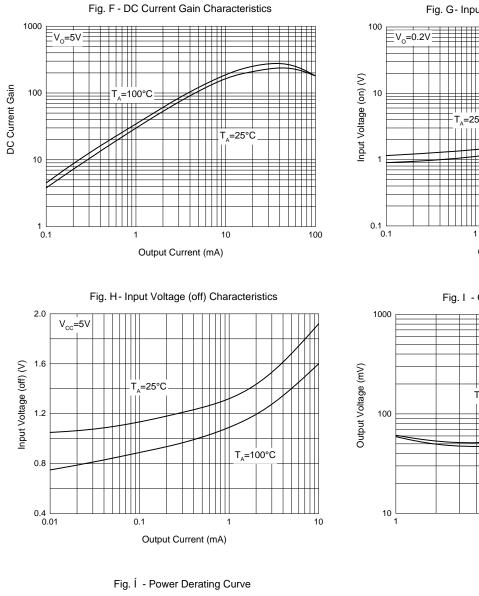
# Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Input Valtage	V <sub>I(off)</sub>	0.5			V	V <sub>CC</sub> =5V, I <sub>O</sub> =100µA
Input Voltage	V <sub>I(on)</sub>			3.0	V	V <sub>0</sub> =0.2V, I <sub>0</sub> =5mA
Output Voltage	V <sub>O(on)</sub>		0.1	0.3	V	I <sub>O</sub> =10mA,I <sub>I</sub> =0.5mA
Input Current	I <sub>I</sub>			0.36	mA	V <sub>I</sub> =5V
Output Current	I <sub>O(off)</sub>			0.5	μA	V <sub>CC</sub> =50V, V <sub>I</sub> =0
DC Current Gain	Gı	56				$V_0=5V, I_0=5mA$
Input Resistance	R <sub>1</sub>	15.4	22	28.6	KΩ	
Resistance Ratio	R <sub>2</sub> /R <sub>1</sub>	0.8	1.0	1.2		
Transition Frequency	f <sub>T</sub>		250		MHz	V <sub>CE</sub> =10V, I <sub>E</sub> =-5mA, f=100MHz





# **Curve Characteristics**



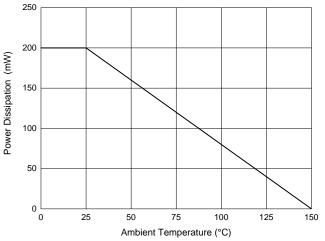


Fig. G- Input Voltage (on) Characteristics

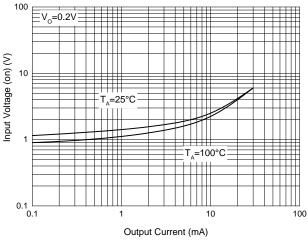
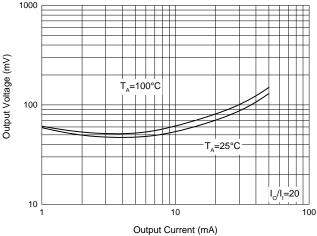


Fig. I - Output Voltage Characteristics





# **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel:3Kpcs/Reel		

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