

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)

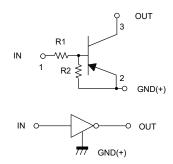
Maximum Ratings @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Тур	Max	Unit
Supply Voltage	V _{cc}		-50		V
Input Voltage	V _{IN}	-30		5.0	V
	Ι _ο		-100		mA
Output Current	I _{C(Max)}		-100		mA
Power Dissipation	P _D		150		mW
Junction Temperature	TJ			150	°C
Storage Temperature	T _{stg}	-55		150	°C

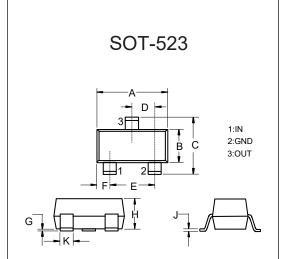
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Device Marking: E13

Internal Structure

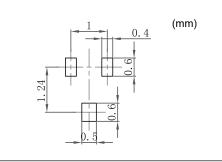






	DIMENSIONS					
	DIM	INCHES		M	М	NOTE
	DIN	MIN	MAX	MIN	MAX	NOTE
,	Α	0.059	0.067	1.50	1.70	
	В	0.030	0.033	0.75	0.85	
	С	0.057	0.069	1.45	1.75	
	D	0.020		0.50		TYP.
	E	0.035	0.043	0.90	1.10	
	G	0.000	0.004	0.00	0.10	
	Н	0.024	0.031	0.60	0.80	
	J	0.004	0.008	0.10	0.20	
	K	0.006	0.014	0.15	0.35	

Suggested Solder Pad Layout





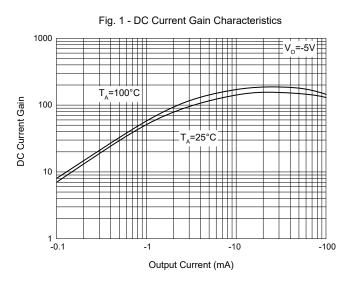
Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Тур	Max	Unit	Conditions
	V _{I(off)}	-0.5			V	V _{CC} =-5V, I _O =-100µA
Input Voltage	V _{I(on)}			-1.3	V	V _o =-0.3V, I _o =-5mA
Output Voltage	V _{O(on)}			-0.3	V	I _o =-5mA,I _I =-0.25mA
Input Current	I _I			-1.8	mA	V _I =-5V
Output Current	I _{O(off)}			-0.5	μA	V _{CC} =-50V, V _I =0
DC Current Gain	Gı	80				V _o =-5V, I _o =-10mA
Input Resistance	R ₁	3.29	4.7	6.11	KΩ	
Resistance Ratio	R ₂ /R ₁	8.0	10	12		
Transition Frequency	f _T		250		MHz	V _{CE} =-10V, I _E =5mA, f=100MHz

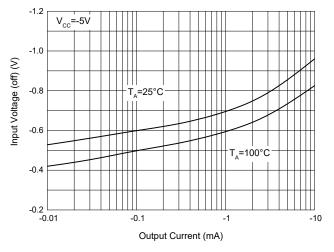


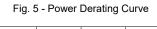


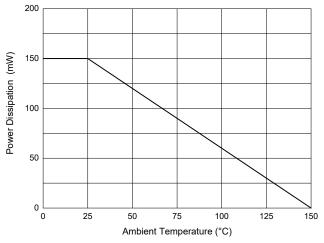
Curve Characteristics











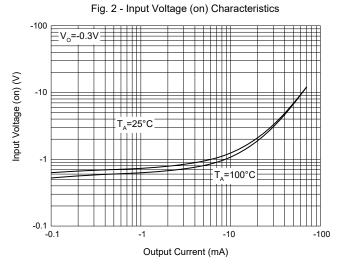
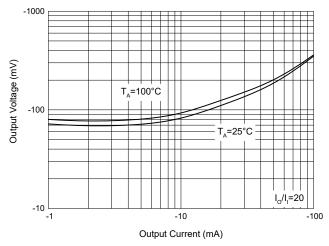


Fig. 4 - Output Voltage Characteristics





Ordering Information

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

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