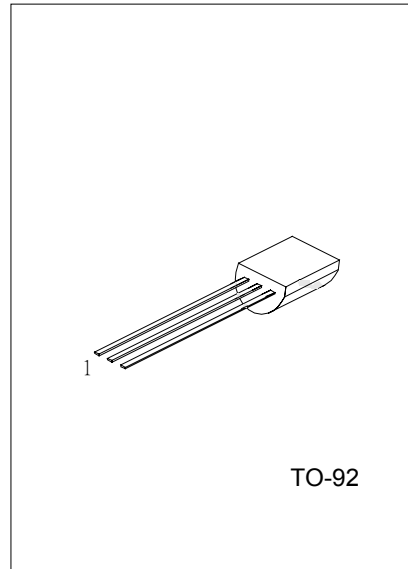
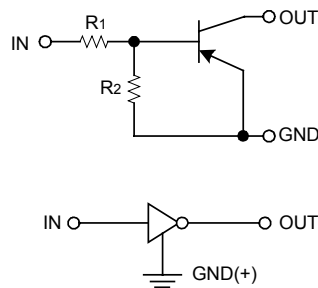


PNP DIGITAL TRANSISTOR
(BUILT-IN RESISTORS)

FEATURES

- * Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see equivalent circuit).
- * The bias resistors consist of thin-film resistors with complete isolation to allow positive 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.

EQUIVALENT CIRCUIT



1: GND 2: OUT 3: IN

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

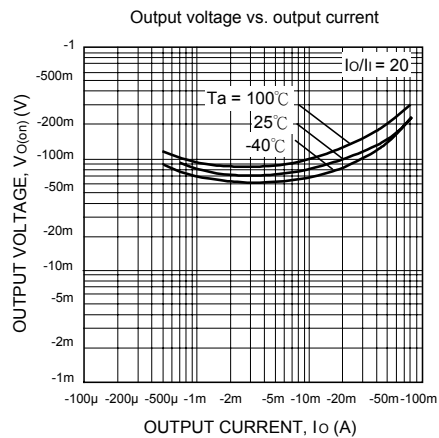
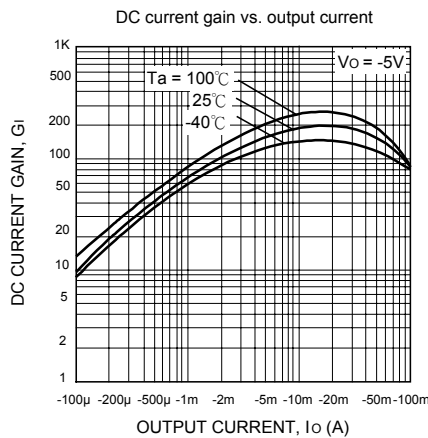
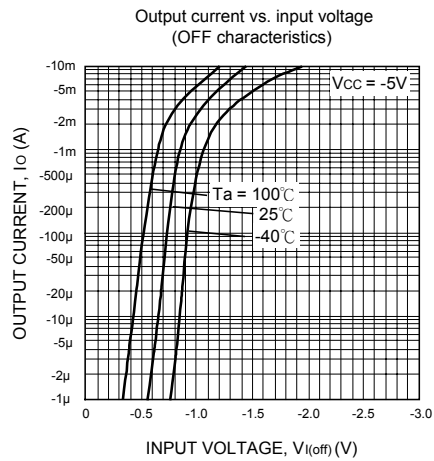
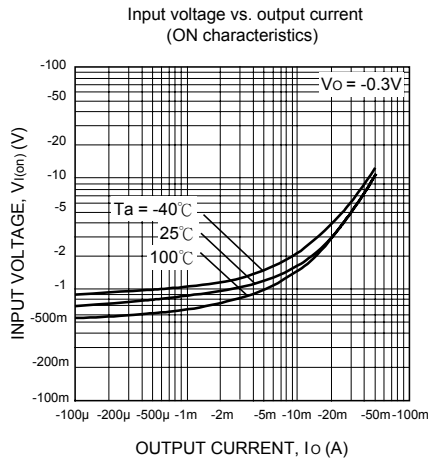
PARAMETER	SYMBOL	RATINGS	UNIT
Supply voltage	V _{cc}	-50	V
Input voltage	V _i	-40 ~ +6	V
Output current	I _o	-70	mA
	I _{c (Max.)}	-100	
Power Dissipation	P _d	300	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input voltage	V _{i (off)}	V _{cc} =-5V, I _o =-100 μA			-0.3	V
	V _{i (on)}	V _o =-0.3V, I _o =-1mA	-1.4			
Output voltage	V _{o (on)}	I _o /I _i =-5mA/-0.25mA		-0.1	-0.3	V
Input current	I _i	V _i =-5V			-0.88	mA
Output current	I _{o (off)}	V _{cc} =-50V, V _i =0V			-0.5	μA
DC current gain	G _i	V _o =-5V, I _o =-5mA	68			
Input resistance	R ₁		7	10	13	KΩ
Resistance ratio	R ₂ /R ₁		3.7	4.7	5.7	
Transition frequency	f _T	V _{CE} =-10V, I _E =5mA, f=100MHz *		250		MHz

* Transition frequency of the device

ELECTRICAL CHARACTERISTIC CURVES



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