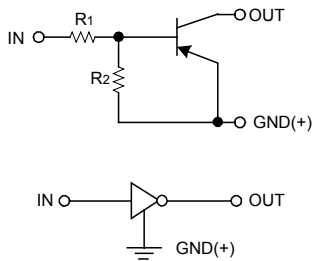


PNP DIGITAL TRANSISTOR
(BUILT-IN RESISTORS)

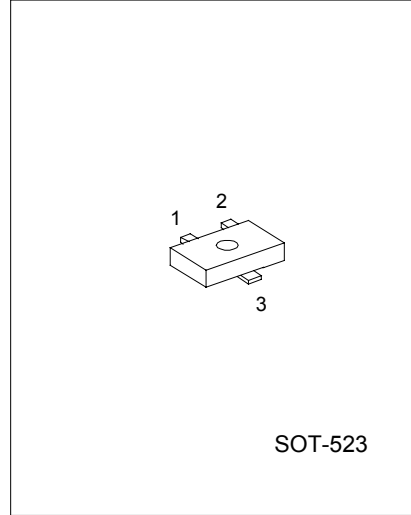
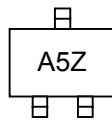
FEATURES

- * 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



MARKING



SOT-523

1: GND 2: IN 3: OUT

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

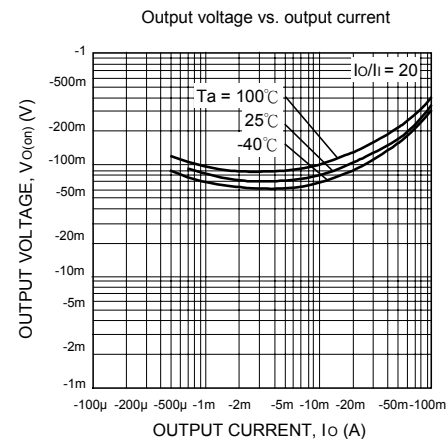
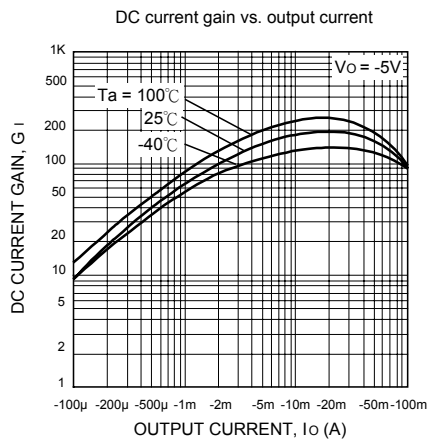
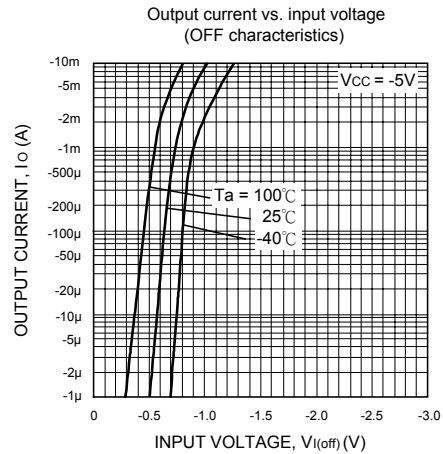
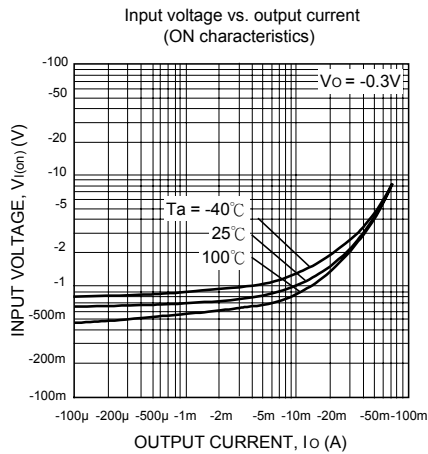
PARAMETER	SYMBOL	RATINGS	UNIT
Supply voltage	V _{CC}	-50	V
Input voltage	V _{IN}	-30 ~ +5	V
Output current	I _O	-100	mA
	I _{C (Max.)}	-100	
Power dissipation	P _D	150	mW
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input voltage	V _{I (off)}	V _{CC} =-5V, I _O =-100μA			-0.5	V
	V _{I (on)}	V _O =-0.3V, I _O =-5mA	-1.3			
Output voltage	V _{O (on)}	I _O /I _I =-5mA/-0.25mA		-0.1	-0.3	V
Input current	I _I	V _I =-5V			-1.8	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 =-10mA	80			
Input resistance	R ₁		3.29	4.7	6.11	KΩ
Resistance ratio	R ₂ /R ₁		8	10	12	
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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