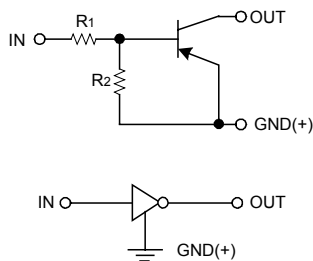


PNP DIGITAL TRANSISTOR  
(BUILT-IN RESISTORS)

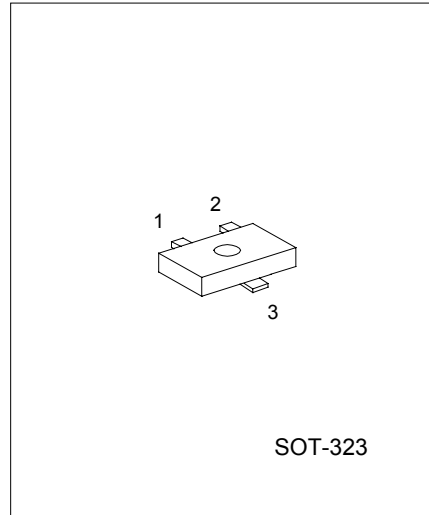
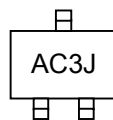
FEATURES

- \* 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-323

1: GND 2: IN 3: OUT

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

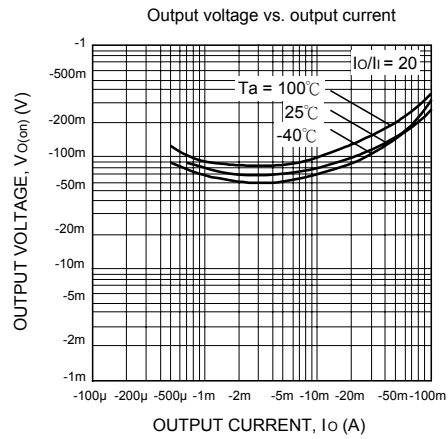
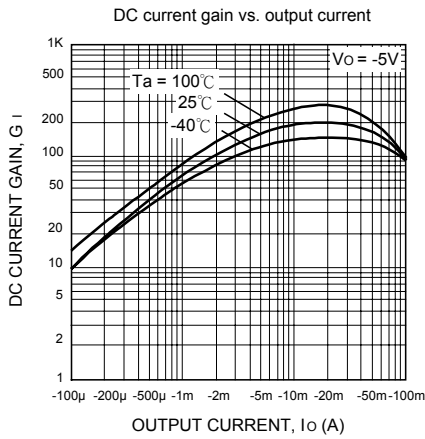
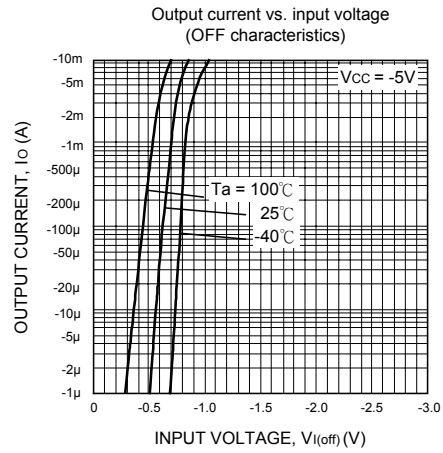
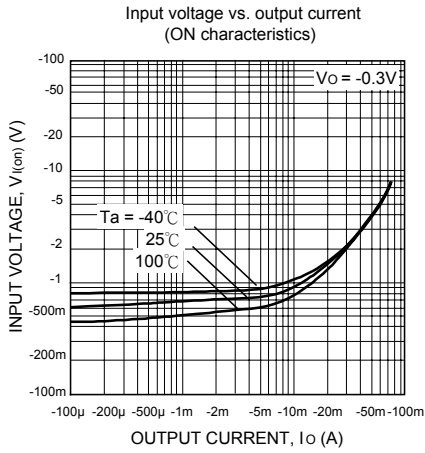
PARAMETER	SYMBOL	RATINGS	UNIT
Supply voltage	Vcc	-50	V
Input voltage	VIN	-12 ~ +5	V
Output current	Io	-100	mA
	IC (Max.)	-100	
Power Dissipation	Pd	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input voltage	VI (off)	Vcc=-5V, Io=-100 μA			-0.5	V
	VI (on)	Vo=-0.3V, Io=-5mA	-1.1			
Output voltage	Vo (on)	Io/Ii=-5mA/-0.25mA		-0.1	-0.3	V
Input current	Ii	Vi=-5V			-3.6	mA
Output current	Io (off)	Vcc=-50V, Vi=0V			-0.5	μA
DC current gain	GI	Vo=-5V, Io=-10mA	80			
Input resistance	R1		1.54	2.2	2.86	KΩ
Resistance ratio	R2/R1		17	21	26	
Transition frequency	fr	VCE=-10V, IE=5mA, f=100MHz *		250		MHz

\* Transition frequency of the device

ELECTRICAL CHARACTERISTIC CURVES



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