



WBFBP-03B Plastic-Encapsulate Transistors

TSA114ENND03 TRANSISTOR

DESCRIPTION

PNP Digital Transistor

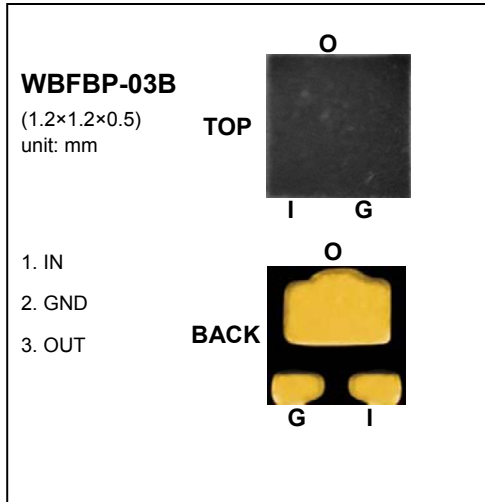
FEATURES

- 1) Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- 2) 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
- 3) Only the on/off conditions need to be set for operation, making device design easy

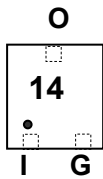
APPLICATION

PNP Digital Transistor

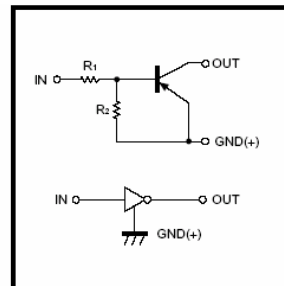
For portable equipment:(i.e. Mobile phone,MP3, MD,CD-ROM, DVD-ROM, Note book PC, etc.)



MARKING: 14



equivalent circuit



Absolute maximum ratings(Ta=25°C)

Parameter	Symbol	Value	Units
Supply voltage	V _{CC}	-50	V
Input voltage	V _{IN}	-40~10	V
Output current	I _O	-50	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	Min	Typ	Max	Unit	Conditions
Input voltage	V _{I(off)}	-0.5			V	V _{CC} =-5V, I _O =-100μA
	V _{I(on)}			-3		V _O =-0.3V, I _O =-10 mA
Output voltage	V _{O(on)}			-0.3	V	I _O /I _I =-10mA/-0.5mA
Input current	I _I			-0.88	mA	V _I =-5V
Output current	I _{O(off)}			-0.5	μA	V _{CC} =-50V, V _I =0
DC current gain	G _I	30				V _O =-5V, I _O =-5mA
Input resistance	R ₁	7	10	13	KΩ	
Resistance ratio	R ₂ /R ₁	0.8	1	1.2		
Transition frequency	f _T		250		MHz	V _{CE} =-10V, I _E =5mA, f=100MHz