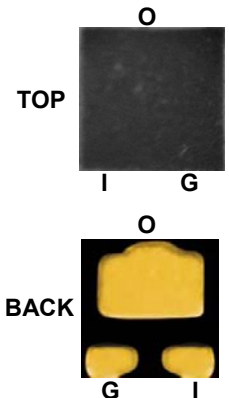


WBFBP-03B Plastic-Encapsulate Transistors

TSA114TNND03 TRANSISTOR

WBFBP-03B

(1.2×1.2×0.5)
unit: mm



1. IN
2. GND
3. OUT

DESCRIPTION

PNP Digital Transistor

FEATURES

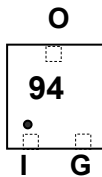
- 1) Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see equivalent circuit)
- 2) The bias resistors consist of thin-film resistors with complete isolation to allow positive biasing of the input. They also have the advantage of almost completely eliminating parasitic effects
- 3) Only the on/off conditions need to be set for operation, making device design easy

APPLICATION

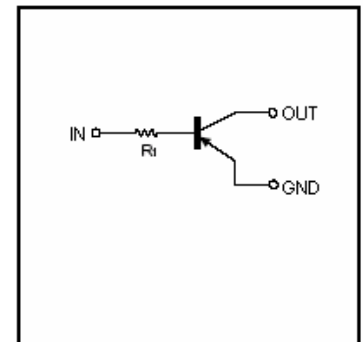
PNP Digital Transistor

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

MARKING: 94



Equivalent circuit



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Limits	Units
V _{CB0}	Collector-Base Voltage	-50	V
V _{CEO}	Collector-Emitter Voltage	-50	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _c	Collector Current -Continuous	-100	mA
P _c	Collector Dissipation	150	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-50μA, I _E =0	-50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-50μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-50V, I _E =0			-0.5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-4V, I _C =0			-0.5	μA
DC current gain	h _{FE}	V _{CE} =-5V, I _C =-1mA	100	250	600	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-10mA, I _B =-1mA			-0.3	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-5mA, f=100MHz		250		MHz
Input resistor	R ₁		7	10	13	KΩ