Shantou Huashan Electronic Devices Co.,Ltd.

NPN DIGITAL TRANSISTOR

HC114T

APPLICATIONS

Switching Circuit，Interface Circuit.

ABSOLUTE MAXIMUM RATINGS（T_a=25℃）

T_{stg}——Storage Temperature····· -55~150℃

T_j——Junction Temperature·····150℃

P_C——Collector Dissipation·····300mW

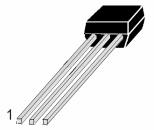
V_{CBO}——Collector-Base Voltage·····50V

V_{CEO}——Collector-Emitter Voltage·····50V

V_{EBO}——Emitter-Base Voltage·····5V

I_C——Collector Current·····100mA

TO-92S



1—Emitter，E
2—Collector,C
3—Base，B

ELECTRICAL CHARACTERISTICS（T_a=25℃）

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	50			V	I_C=50μA, I_E=0
BV_{CEO}	Collector-Emitter Breakdown Voltage	50			V	I_C=1mA, I_B=0
BV_{EBO}	Emitter-Base Breakdown Voltage	5			V	I_E=50μA，I_C=0
I_{CBO}	Collector Cut-off Current			0.1	μA	V_{CB}=50V, I_E=0
I_{EBO}	Emitter Cut-off Current			0.1	μA	V_{EB}=4V, I_C=0
H_{FE}	DC Current Gain	100		600		V_{CE}=5V, I_C=1mA
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.3	V	I_C=10mA, I_B=1mA
$V_{I(off)}$	Input Off Voltage	0.4	0.55	0.8	V	V_{CE}=5V, I_C=0.1mA
$V_{I(on)}$	Input On Voltage	0.7	1.2	3.0	V	V_{CE}=0.2V, I_C=10mA
R1	Input Resistor	7.0	10	13	KΩ	
fr	Current Gain-Bandwidth Product		250		MHz	V_{CE}=10V,I_C=5mA
Cob	Output Capacitance		3.7		pF	V_{CB}=10V,f=1MHz