



Shantou Huashan Electronic Devices Co., Ltd.

NPN SILICON TRANSISTOR

H1420

GENERAL PURPOSE AMPLIFIER AND LOW NOISE

AMPLIFIER APPLICATIONS

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

T_{stg} —Storage Temperature..... $-55\sim 150^{\circ}\text{C}$

T_j —Junction Temperature..... 150°C

P_C —Collector Dissipation..... 625mW

V_{CBO} —Collector-Base Voltage..... 60V

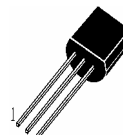
V_{CEO} —Collector-Emitter Voltage..... 60V

V_{EBO} —Emitter-Base Voltage..... 7V

I_C —Collector Current..... 200mA

I_B —Base Current..... 200mA

TO-92



1—Emitter, E

2—Base, B

3—Collector, C

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Breakdown Voltage	60			V	$I_C=1\text{mA}$, $I_B=0$
I_{CBO}	Collector Cut-off Current			50	nA	$V_{\text{CB}}=40\text{V}$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			100	nA	$V_{\text{EB}}=6\text{V}$, $I_C=0$
HFE	DC Current Gain	70		700		$V_{\text{CE}}=5\text{V}$, $I_C=2\text{mA}$
$V_{\text{CE(sat)}}$	Collector- Emitter Saturation Voltage			0. 22	V	$I_C=50\text{mA}$, $I_B=10\text{mA}$
V_{BE}	Base-Emitter Voltage			1. 0	V	$V_{\text{CE}}=5\text{V}$, $I_C=2\text{mA}$
fT	Current Gain-Bandwidth Product	150	400		MHz	$V_{\text{CE}}=5\text{V}$, $I_C=10\text{mA}$
Cob	Output Capacitance		3. 5		pF	$V_{\text{CB}}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$