Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

HA42

HIGH VOLTAGE TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

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

T_j——Junction Temperature……150℃

P_C——Collector Dissipation……625mW

V_{CBO}——Collector-Base Voltage……300V

V_{CEO}——Collector-Emitter Voltage……300V

V_{EBO}——Emitter-Base Voltage……6V

I_C——Collector Current……500mA

TO-92

1—Emitter，E
2—Base，B
3—Collector，C

ELECTRICAL CHARACTERISTICS (T_a=25℃)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	300			V	I_C=100μA, I_E=0
BV_{CEO}	Collector-Emitter Breakdown Voltage	300			V	I_C=1mA, I_B=0
BV_{EBO}	Emitter-Base Breakdown Voltage	5			V	I_E=100μA，I_C=0
I_{CBO}	Collector Cut-off Current			100	nA	V_{CB}=200V, I_E=0
I_{EBO}	Emitter-Base Cut-off Current			100	nA	V_{EB}=3V, I_C=0
I_{CES}	Collector Cut-off Current			1	μA	V_{CE}=300V, V_{BE}=0
H_{FE}（1）	DC Current Gain	25				V_{CE}=10V, I_C=1mA
H_{FE}（2）		40				V_{CE}=10V, I_C=10mA
H_{FE}（3）		40				V_{CE}=10V, I_C=30mA
$V_{CE(sat1)}$	Collector- Emitter Saturation Voltage			0.5	V	I_C=20mA, I_B=2mA
$V_{CE(sat2)}$				1	V	I_C=60mA, I_B=6mA
$V_{BE(sat1)}$	Base-Emitter Saturation Voltage			0.9	V	I_C=20mA, I_B=2mA
f_T	Current Gain-Bandwidth Product	50			MHz	V_{CE}=20V, I_C=10mA F=100MHz