Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

H13001

HIGH VOLTAGE SWITCH MODE APPLICICATIONS

High Speed Switching

Suitable for Switching Regulator and Montor Control

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

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

T_j——Junction Temperature·····150℃

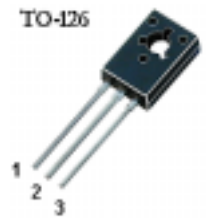
P_C——Collector Dissipation·····10W

V_{CBO}——Collector-Base Voltage·····600V

V_{CEO}——Collector-Emitter Voltage·····400V

V_{EBO}——Emitter-Base Voltage·····9V

I_C——Collector Current·····0.25A



1—Base，B

2—Collector，C

3— Emitter，E

ELECTRICAL CHARACTERISTICS (T_a=25℃)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	600			V	I_C=1mA, I_E=0
BV_{CEO}	Collector-Emitter Breakdown Voltage	400			V	I_C=10mA, I_B=0
BV_{EBO}	Emitter-Base Breakdown Voltage	9			V	I_E=1mA， I_C=0
I_{CBO}	Collector Cut-off Current			100	μA	V_{CB}=500V, I_E=0
I_{EBO}	Emitter-Base Cut-off Current			100	μA	V_{EB}=9V, I_C=0
H_{FE}	DC Current Gain	10		40		V_{CE}=10V, I_C=20mA
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.6	V	I_C=100mA, I_B=20mA
$V_{BE(sat)}$	Base-Emitter Saturation Voltage			1.2	V	I_C=100mA, I_B=20mA
f_T	Current Gain-Bandwidth Product	8			MHz	V_{CE}=10V, I_C=20mA

h_{FE} Classification

H1	H2	H3	H4	H5
10-16	14-21	19-26	24-31	29-40