Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

KSH13005

HIGH VOLTAGE SWITCH MODE APPLICATION

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 (T_c=25℃) ····· 75W

V_{CBO}——Collector-Base Voltage····· 700V

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

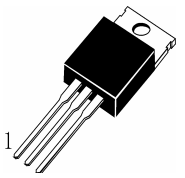
V_{EBO}——Emitter-Base Voltage····· 9V

I_C——Collector Current (DC)····· 4A

I_C——Collector Current (Pulse) ····· 8A

I_B——Base Current·····2A

TO-220



1—Base，B
2—Collector，C
3—Emitter, E

电参数 (T_a=25℃)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Sustaining Voltage	400			V	I_C=10mA, I_B=0
I_{EBO}	Emitter-Base Cut-off Current			1	mA	V_{EB}=9V, I_C=0
H_{FE}	DC Current Gain	10		40		V_{CE}=5V, I_C=1A
		8		40		V_{CE}=5V, I_C=2A
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.5	V	I_C=1A, I_B=0.2A
				0.6	V	I_C=2A, I_B=0.5A
				1	V	I_C=4A, I_B=1A
$V_{BE(sat)}$	Base- Emitter Saturation Voltage			1.2	V	I_C=1A, I_B=0.2A
				1.6	V	I_C=2A, I_B=0.5A
Cob	Output Capacitance		65		pF	V_{CB}=10V, f=0.1MHz
f_T	Current Gain-Bandwidth Product	4			MHz	V_{CE}=10V, I_C=0.5A
t_{ON}	Turn On Time			0.8	μs	V_{CC}=125V,
t_S	Storage Time			4	μs	I_C=2A,
t_F	Fall Time			0.9	μs	I_{B1}=-I_{B2}=0.4A

h_{FE} Classification： H1（10--16） H2（14--21） H3（19--26） H4（24--31） H5（29--40）