



Shantou Huashan Electronic Devices Co.,Ltd.

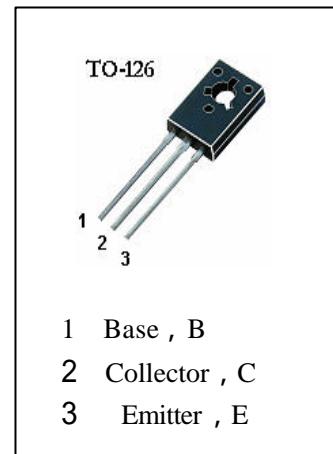
NPN SILICON TRANSISTOR

KSH13003**HIGH VOLTAGE SWITCH MODE APPLICATIONS**

High Speed Switching. Suitable for Switching Regulator and Monitor Control

ABSOLUTE MAXIMUM RATINGS (T_a=25)

T _{stg} —— Storage Temperature.....	-65~150
T _j —— Junction Temperature.....	150
P _C —— Collector Dissipation.....	40W
V _{CBO} —— Collector-Base Voltage.....	700V
V _{CEO} —— Collector-Emitter Voltage.....	400V
V _{EBO} —— Emitter-Base Voltage.....	9V
I _c —— Collector Current.....	1.5A
I _B —— Base Current.....	0.75A

**ELECTRICAL CHARACTERISTICS (T_a=25)**

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCEO	Collector-Emitter Breakdown Voltage	400			V	I _C =5mA, I _B =0
I _{EBO}	Emitter-Base Cut-off Current			10	μ A	V _{EB} =9V, I _C =0
H _{FE1}	DC Current Gain	10		40		V _{CE} =5V, I _C =0.5A
H _{FE2}	DC Current Gain	5				V _{CE} =2V, I _C =1A
V _{CE(sat)1}	Collector- Emitter Saturation Voltage			0.5	V	I _C =0.5A, I _B =0.1A
V _{CE(sat)2}	Collector- Emitter Saturation Voltage			1	V	I _C =1A, I _B =0.25A
V _{CE(sat)3}	Collector- Emitter Saturation Voltage			3	V	I _C =1.5A, I _B =0.5A
V _{BE(sat)1}	Base-Emitter Saturation Voltage			1	V	I _C =0.5A, I _B =0.1A
V _{BE(sat)2}	Base-Emitter Saturation Voltage			1.2	V	I _C =1A, I _B =0.25A
f _T	Current Gain-Bandwidth Product	4			MHz	V _{CE} =10V, I _C =0.1A
t _{ON}	Turn On Time			1.1	μ s	V _{CC} =125V, I _C =1A,
t _{STG}	Storage Time			4.0	μ s	I _{B1} =0.2A, I _{B2} =-0.2A
t _F	Fall Time			0.7	μ s	R _L =125

h_{FE} Classification

H1

H2

H3

H4

H5

10-16

14-21

19-26

24-31

29-40

