



Shantou Huashan Electronic Devices Co., Ltd.

NPN SILICON TRANSISTOR

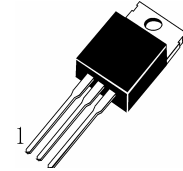
KSH13007

■ HIGH VOLTAGE SWITCH MODE APPLICATION

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

T_{stg}	—Storage Temperature		-55~150°C
T_j	—Junction Temperature		150°C
P_C	—Collector Dissipation ($T_c=25^{\circ}\text{C}$)		80W
V_{CBO}	—Collector-Base Voltage		700V
V_{CEO}	—Collector-Emitter Voltage		400V
V_{EBO}	—Emitter-Base Voltage		9V
I_C	—Collector Current (DC)		8A
I_C	—Collector Current (Pulse)		16A
I_B	—Base Current		4A

TO-220



1—Base, B
2—Collector, C
3—Emitter, E

■ 电参数 ($T_a=25^{\circ}\text{C}$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Sustaining Voltage	400			V	$I_C=10\text{mA}$, $I_B=0$
I_{EBO}	Emitter-Base Cutoff Current			1	mA	$V_{\text{EB}}=9\text{V}$, $I_C=0$
$H_{\text{FE}} (1)$	DC Current Gain	10		40		$V_{\text{CE}}=5\text{V}$, $I_C=2\text{A}$
$H_{\text{FE}} (2)$		5		30		$V_{\text{CE}}=5\text{V}$, $I_C=5\text{A}$
$V_{\text{CE(sat1)}}$	Collector- Emitter Saturation Voltage			1	V	$I_C=2\text{A}$, $I_B=400\text{mA}$
$V_{\text{CE(sat2)}}$				2	V	$I_C=5\text{A}$, $I_B=1\text{A}$
$V_{\text{CE(sat3)}}$				3	V	$I_C=8\text{A}$, $I_B=2\text{A}$
$V_{\text{BE(sat1)}}$	Base- Emitter Saturation Voltage			1.2	V	$I_C=2\text{A}$, $I_B=0.4\text{A}$
$V_{\text{BE(sat2)}}$				1.6	V	$I_C=5\text{A}$, $I_B=1\text{A}$
C_{ob}	Output Capacitance		110		pF	$V_{\text{CB}}=10\text{V}$, $f=0.1\text{MHz}$ z
f_T	Current Gain-Bandwidth Product	4				$V_{\text{CE}}=10\text{V}$, $I_C=500\text{mA}$
t_{ON}	Turn On time			1.6	uS	$V_{\text{CC}}=125\text{V}$, $I_C=5\text{A}$ $I_{B1}=I_{B2}=1\text{A}$
t_{STG}	Storage Time			3	uS	
t_F	Fall Time			0.7	uS	

■ h_{FE} Classification

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