

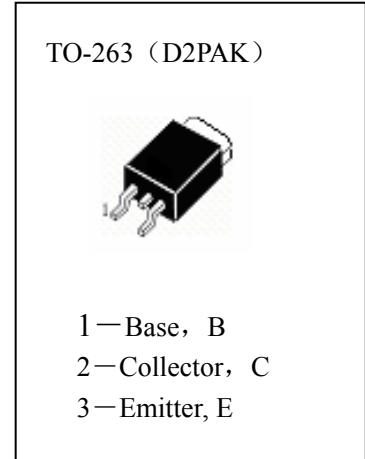


KSH13007W

■ HIGH VOLTAGE SWITCH MODE APPLICATION

■ ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

- T_{stg}—Storage Temperature..... -55~150°C
- T_j—Junction Temperature..... 150°C
- P_C—Collector Dissipation (T_c=25°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



■ 电参数 (T_a=25°C)

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 Cutoff Current			1	mA	V _{EB} =9V, I _C =0
H _{FE} (1)	DC Current Gain	10		40		V _{CE} =5V, I _C =2A
H _{FE} (2)		5		30		V _{CE} =5V, I _C =5A
V _{CE(sat1)}	Collector- Emitter Saturation Voltage			1	V	I _C =2A, I _B =400mA
V _{CE(sat2)}				2	V	I _C =5A, I _B =1A
V _{CE(sat3)}				3	V	I _C =8A, I _B =2A
V _{BE(sat1)}	Base- Emitter Saturation Voltage			1.2	V	I _C =2A, I _B =0.4A
V _{BE(sat2)}				1.6	V	I _C =5A, I _B =1A
C _{ob}	Output Capacitance		110		pF	V _{CB} =10V, f=0.1MHz z
f _T	Current Gain-Bandwidth Product	4				V _{CE} =10V, I _C =500mA
t _{ON}	Turn On time			1.6	uS	V _{CC} =125V, I _C =5A I _{B1} =I _{B2} =1A
t _{STG}	Storage Time			3	uS	
t _F	Fall Time			0.7	uS	

■ hFE Classification

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

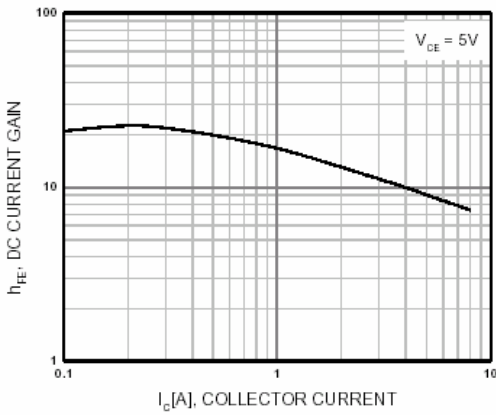


Figure 1. DC current Gain

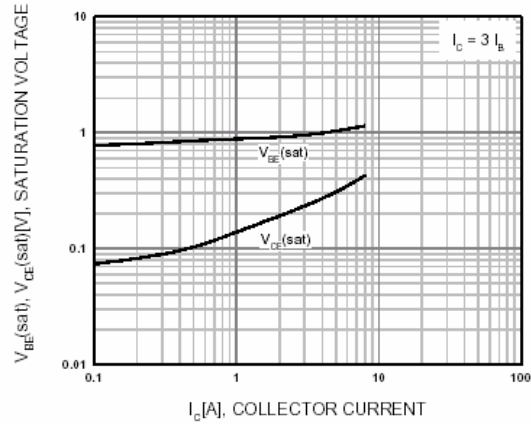


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

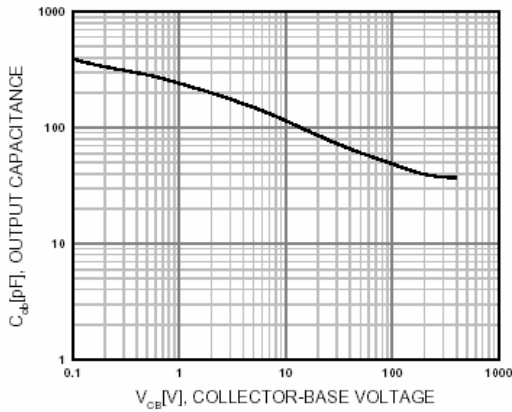


Figure 3. Collector Output Capacitance

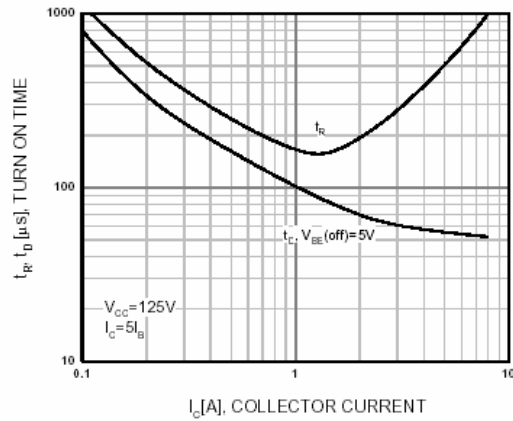


Figure 4. Turn On Time

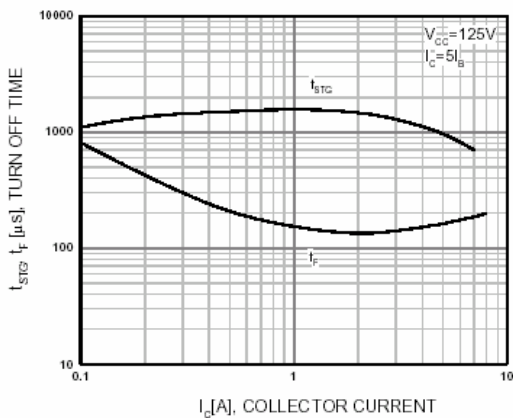


Figure 5. Turn Off Time

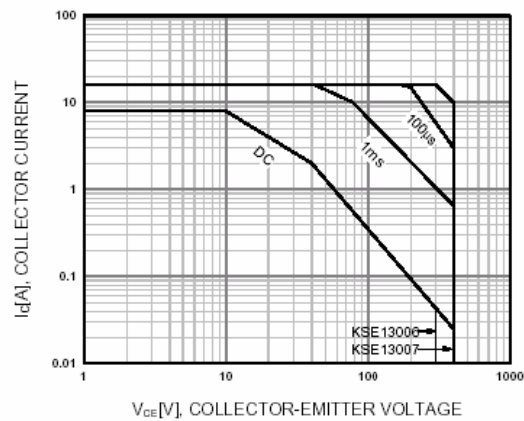


Figure 6. Safe Operating Area



Shantou Huashan Electronic Devices Co.,Ltd.

NPN SILICON TRANSISTOR

KSH13007W

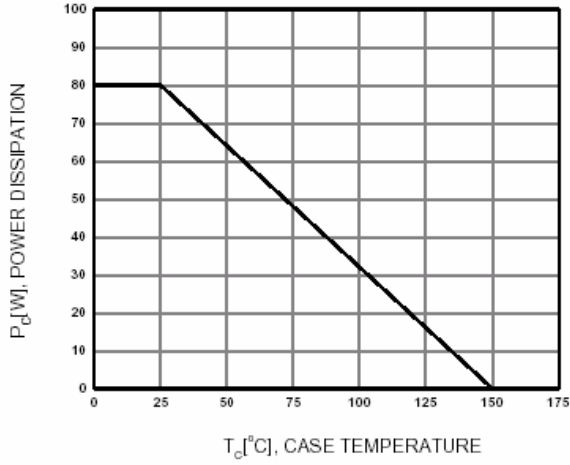


Figure 7. Power Derating