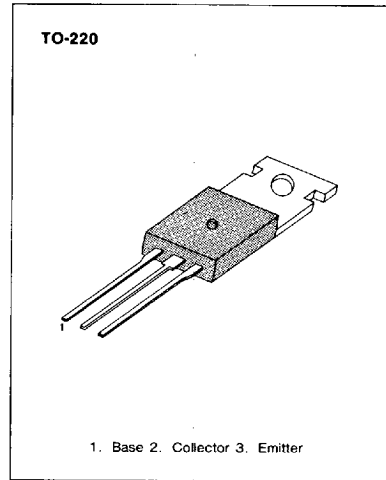


HIGH VOLTAGE SWITCH MODE APPLICATION

- High Speed Switching
- Suitable for Switching Regulator and Motor Control

ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)

Characteristic	Symbol	Rating	Unit
Collector Base Voltage : KSE13006	V _{CBO}	600	V
		700	V
Collector Emitter Voltage: KSE13006	V _{CEO}	300	V
		400	V
Emitter Base Voltage	V _{EBO}	9	V
Collector Current (DC)	I _C	8	A
Collector Current (Pulse)	I _C	16	A
Base Current	I _B	4	A
Collector Dissipation	P _C	80	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	- 65 ~ 150	°C

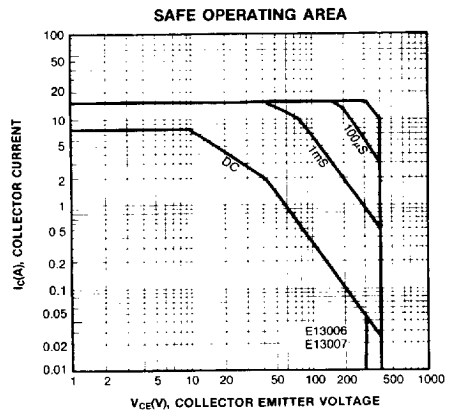
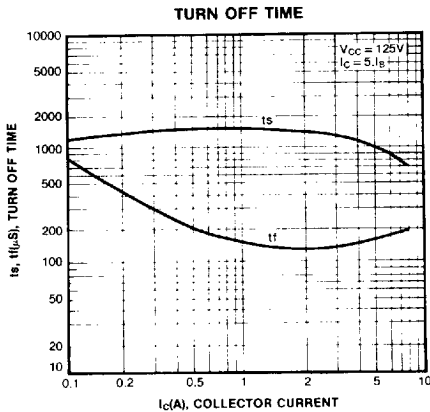
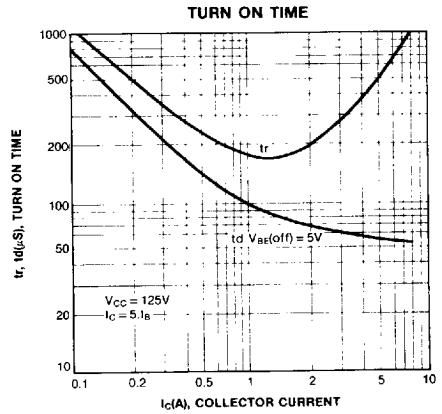
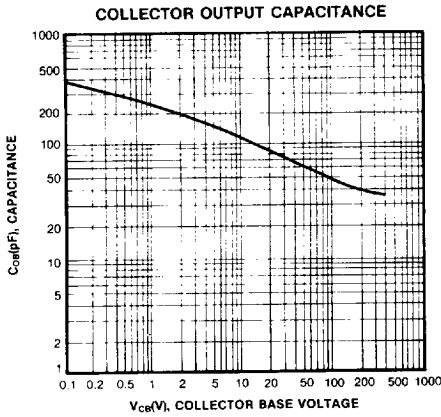
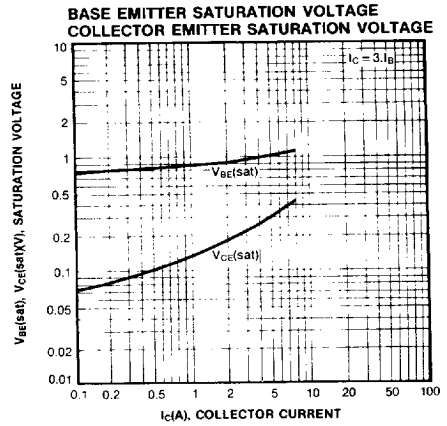
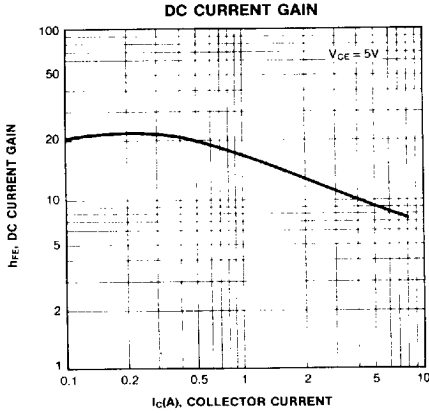


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ELECTRICAL CHARACTERISTICS (T_a = 25°C)

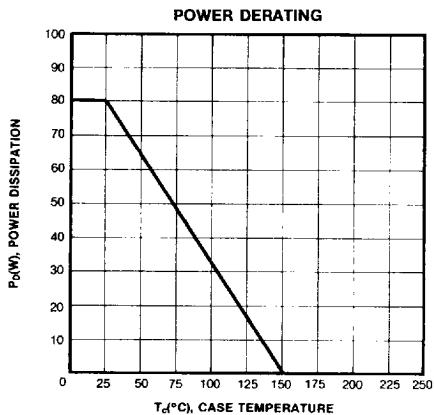
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
*Collector Emitter Sustaining Voltage: KSE13006	V _{CEO(SUS)}	I _C = 10mA, I _B = 0	300			V
: KSE13007			400			V
Emitter Cutoff Current	I _{EBO}	V _{EB} = 9V, I _C = 0			1	mA
*DC Current Gain	h _{FE}	V _{CE} = 5V, I _C = 2A	8		60	
		V _{CE} = 5V, I _C = 5A	5		30	
*Collector Emitter Saturation Voltage	V _{CE(sat)}	I _C = 2A, I _B = 0.4A			1	V
		I _C = 5A, I _B = 1A			2	V
		I _C = 8A, I _B = 2A			3	V
*Base Emitter Saturation Voltage	V _{BE(sat)}	I _C = 2A, I _B = 0.4A			1.2	V
		I _C = 5A, I _B = 1A			1.6	V
Output Capacitance	C _{OB}	V _{CB} = 10V, f = 0.1MHz		110		pF
Current Gain Bandwidth Product	f _T	V _{CE} = 10V, I _C = 0.5A	4			MHz
Turn On Time	t _{on}	V _{CC} = 125V, I _C = 5A			1.6	μS
Storage Time	t _s	I _{B1} = I _{B2} = 1A			3	μS
Fall Time	t _f				0.7	μS

* Pulse Test: PW ≤ 300μS, Duty Cycle ≤ 2%



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