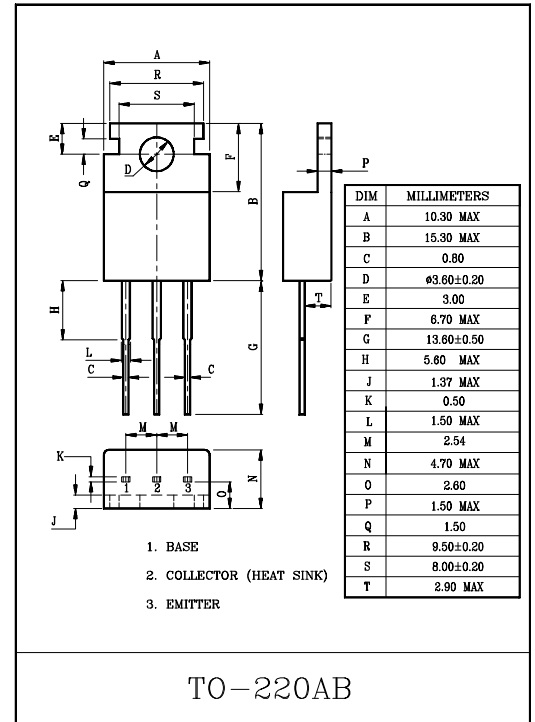


HIGH VOLTAGE AND HIGH RELIABILITY
HIGH SPEED SWITCHING, WIDE SOA

MAXIMUM RATINGS (Ta=25°C)

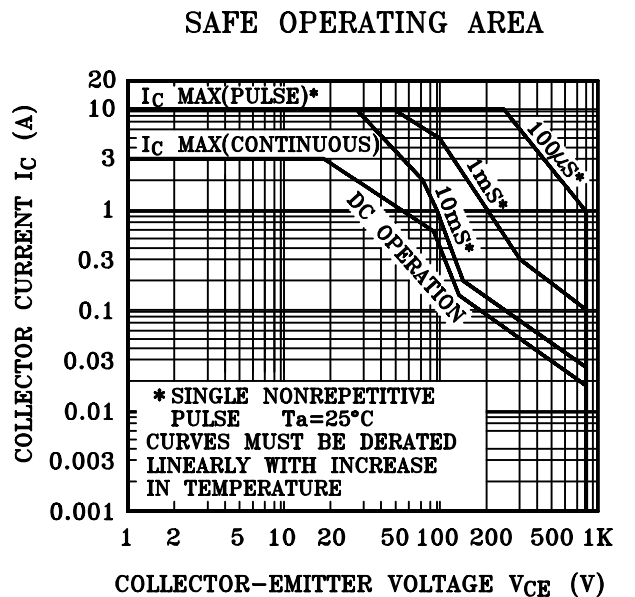
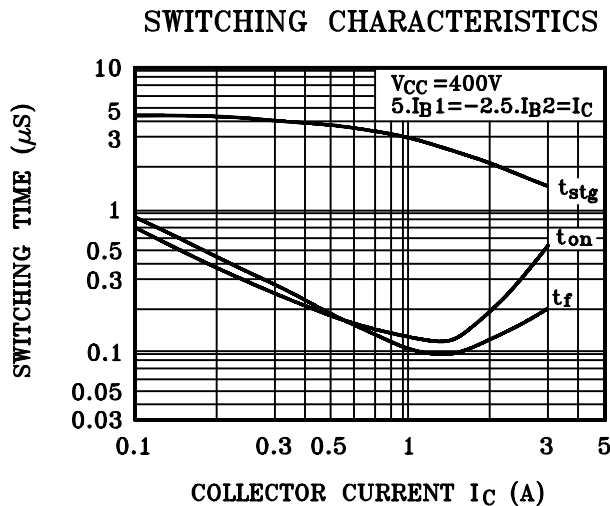
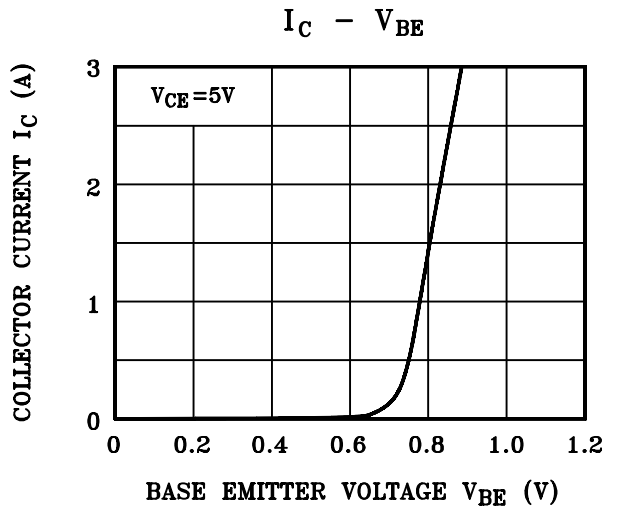
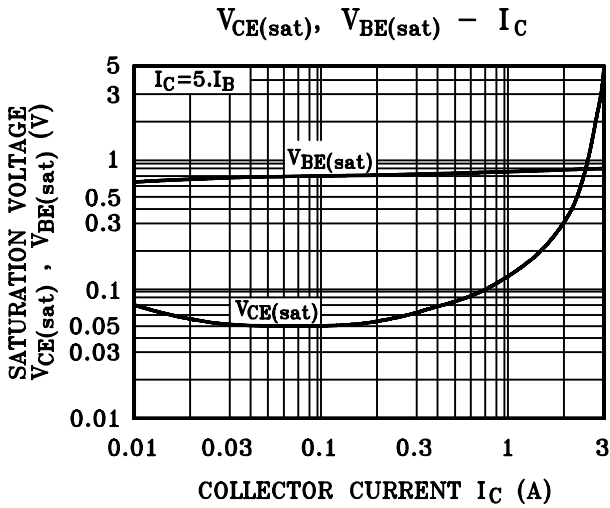
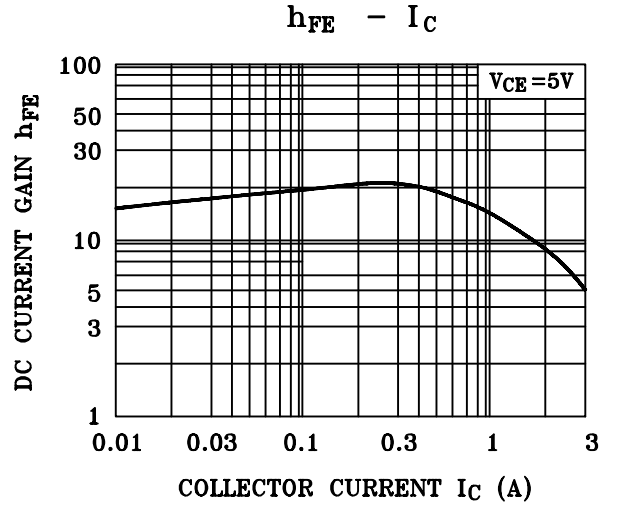
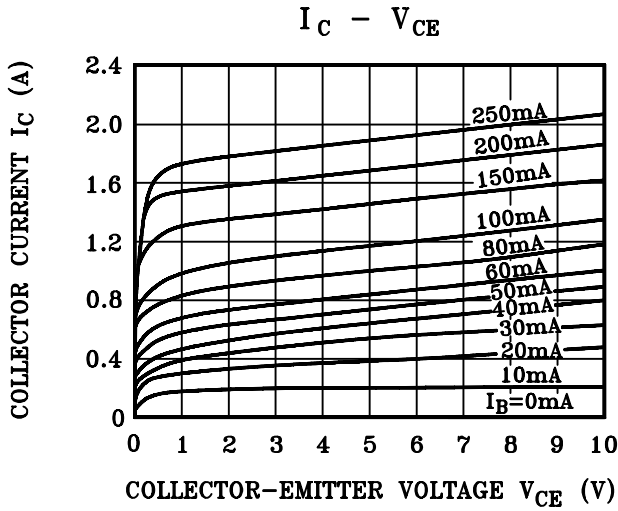
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V _{CB0}	1100	V
Collector-Emitter Voltage		V _{CEO}	800	V
Emitter-Base Voltage		V _{EBO}	7	V
Collector Current	DC	I _C	3	A
	Pulse	I _C	10	
Base Current		I _B	1.5	A
Collector Power Dissipation (T _C =25°C)		P _C	50	W
Junction Temperature		T _J	150	°C
Storage Temperature Range		T _{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (T_C=25°C)

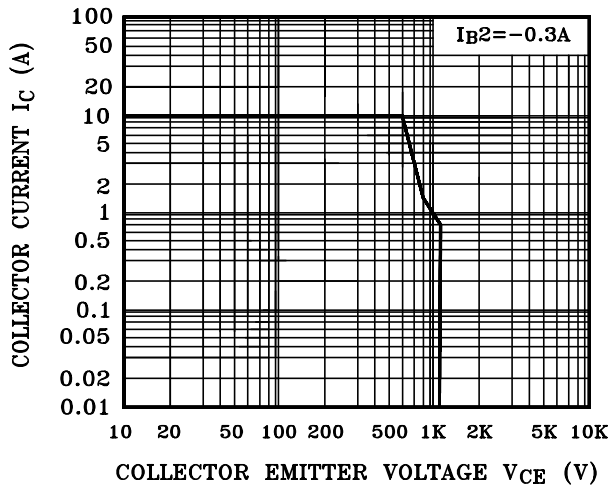
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I _{CB0}	V _{CB} =800V, I _E =0	-	-	10	μA
Emitter Cut-off Current		I _{EBO}	V _{EB} =5V, I _C =0	-	-	10	μA
Collector-Emitter Sustaining Voltage		V _{CEX(SUS)}	I _C =1.5A, I _{B1} =-I _{B2} =0.3A L=2mH, Clamped	800	-	-	V
Collector-Emitter Saturation Voltage		V _{CE(sat)}	I _C =1.5A, I _B =0.3A	-	-	2	V
Base-Emitter Saturation Voltage		V _{BE(sat)}	I _C =1.5A, I _B =0.3A	-	-	1.5	V
DC Current Gain	h _{FE} (1) (Note)		V _{CE} =5V, I _C =0.2A	15	-	40	
	h _{FE} (2)		V _{CE} =5V, I _C =1A	8	-	-	
Collector-Base Breakdown Voltage		BV _{CB0}	I _C =1mA, I _E =0	1100	-	-	V
Collector-Emitter Breakdown Voltage		BV _{CEO}	I _C =5mA, R _{BE} =∞	800	-	-	V
Emitter-Base Breakdown Voltage		BV _{EBO}	I _E =1mA, I _C =0	7	-	-	V
Collector Output Capacitance		C _{ob}	V _{CB} =10V, f=1MHz, I _E =0	-	60	-	pF
Transition Frequency		f _T	V _{CE} =10V, I _C =0.1A	-	15	-	MHz
Switching Time	Turn On Time	t _{on}		-	-	0.5	μS
	Storage Time	t _{stg}		-	-	3	
	Fall Time	t _f		-	-	0.3	

Note : h_{FE} (1) Classification R:15~30, O:20~40



KTC4527

REVERSE BIAS SAFE OPERATING AREA



$P_c - T_a$

