

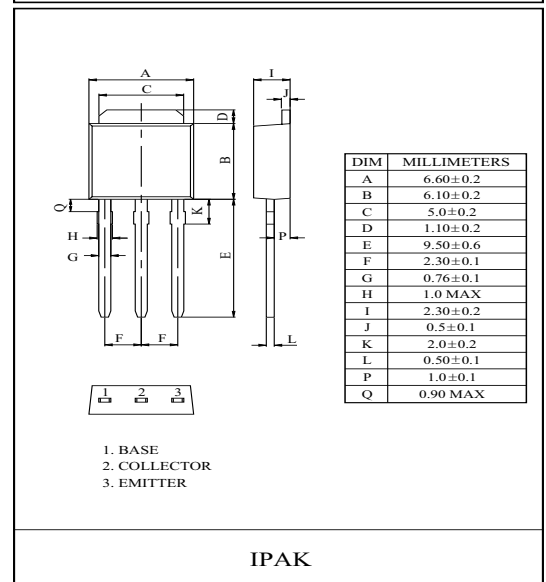
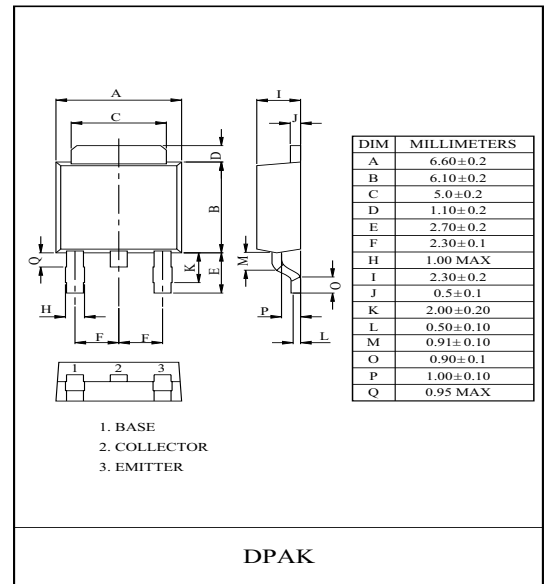
### HIGH VOLTAGE SWITCHING.

### FEATURES

- Low Collector Saturation Voltage  
:  $V_{CE(sat)}=0.5V(\text{Max.})$  at  $(I_C=0.5A)$ .
- High Switching Speed Typically.  
:  $t_f \approx 0.4\mu S$  at  $I_C=1A$ .
- Complementary to KTA1862D.
- Wide Safe Operating Area (SOA)

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	400	V
Collector-Emitter Voltage		$V_{CEO}$	400	V
Emitter-Base Voltage		$V_{EBO}$	7	V
Collector Current	DC	$I_C$	2.0	A
	Pulse		4.0	
Collector Power Dissipation	Ta=25°C	$P_C$	1.0	W
	Tc=25°C		10	
Junction Temperature		$T_j$	150	°C
Storage Temperature Range		$T_{stg}$	-55 ~ 150	°C

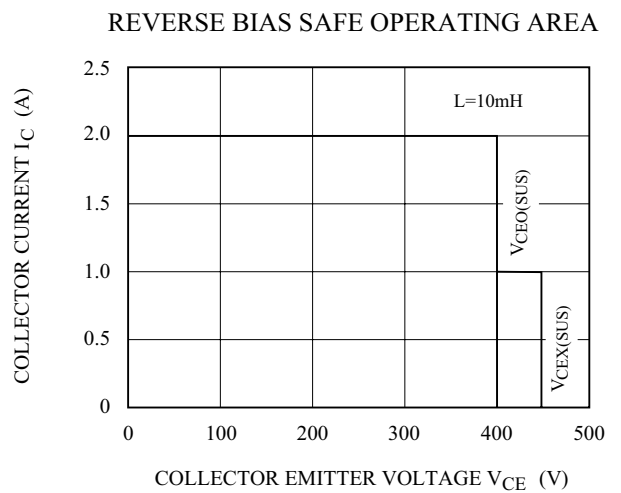
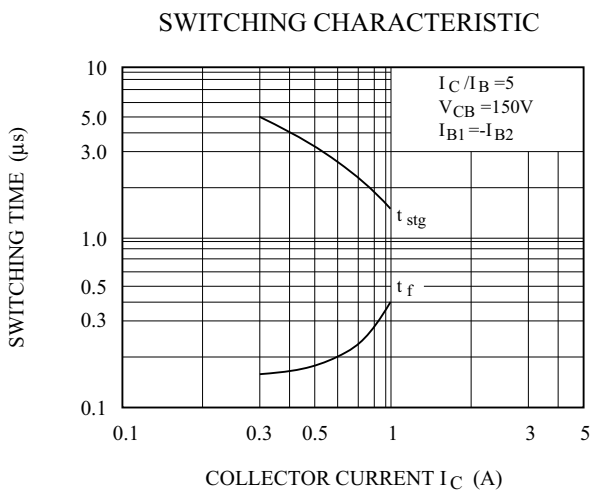
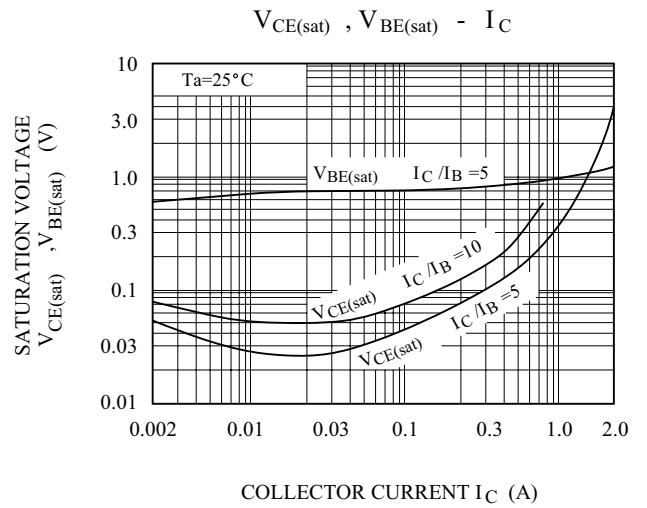
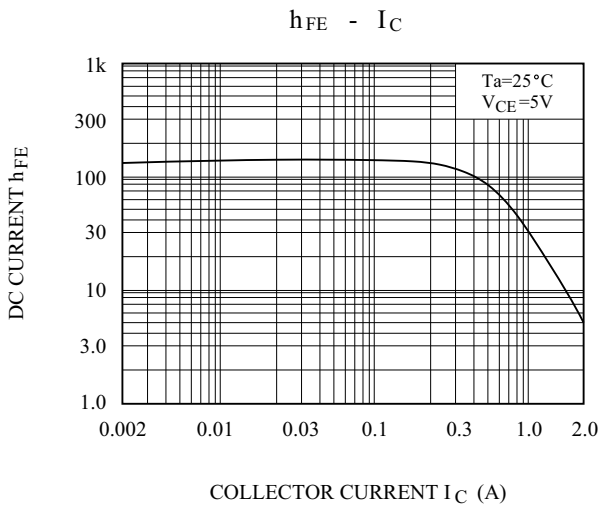
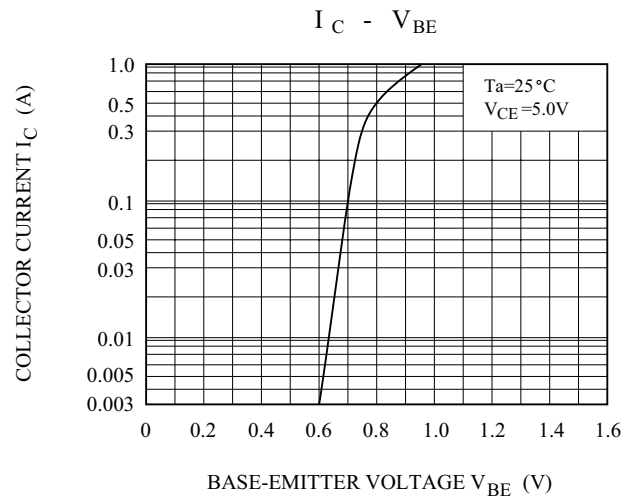
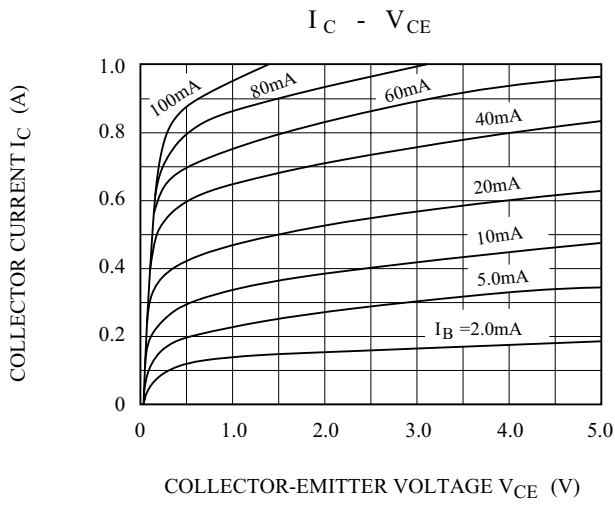


### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=400V, I_E=0$	-	-	1.0	$\mu A$
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=5.0V, I_C=0$	-	-	1.0	$\mu A$
DC Current Gain	$h_{FE(1)}$ (Note)	$h_{FE}$	$V_{CE}=5.0V, I_C=100mA$	56	100	180	
	$h_{FE(2)}$		$V_{CE}=5.0V, I_C=500mA$	6	-	-	
Collector Saturation Voltage		$V_{CE(sat)}$	$I_C=500mA, I_B=100mA$	-	0.3	0.5	V
Base Saturation Voltage		$V_{BE(sat)}$	$I_C=500mA, I_B=100mA$	-	-	1.2	V
Transition Frequency		$f_T$	$V_{CE}=10V, I_E=-100mA, f=5MHz$	-	18	-	MHz
Collector Output Capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	30	-	pF
Switching Time	Turn-on Time	$t_{on}$	<p><math>I_{B1}=-I_{B2}=0.2A</math> DUTY CYCLE <math>\leq 1\%</math></p>	-	0.2	-	$\mu S$
	Storage Time	$t_{stg}$		-	1.8	-	
	Fall Time	$t_f$		-	0.4	-	

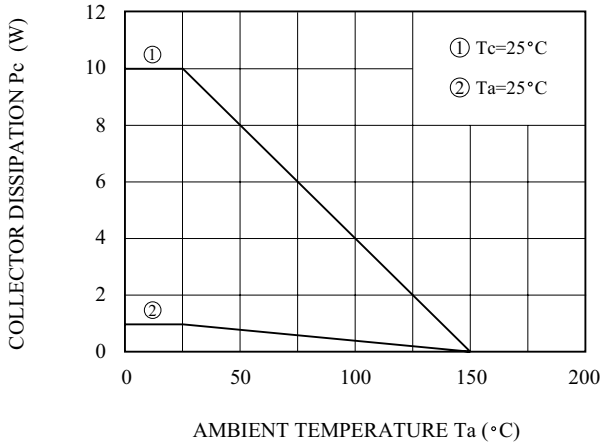
Note :  $h_{FE(1)}$  Classification O:56 ~ 120 , Y:82 ~ 180

# KTC3631D/L



# KTC3631D/L

Pc - Ta



SAFE OPERATING AREA

