

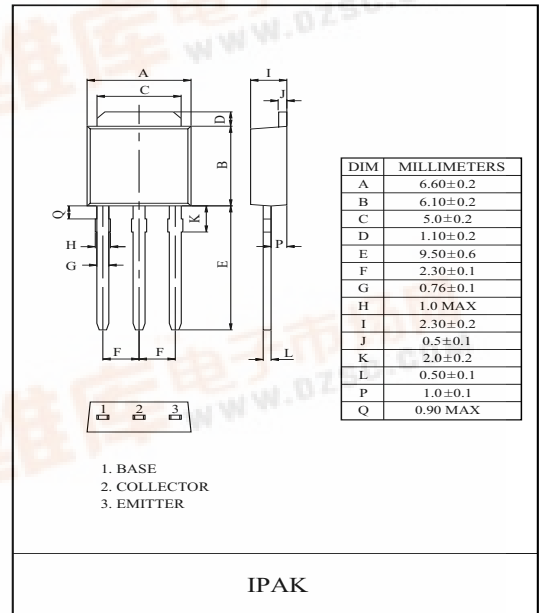
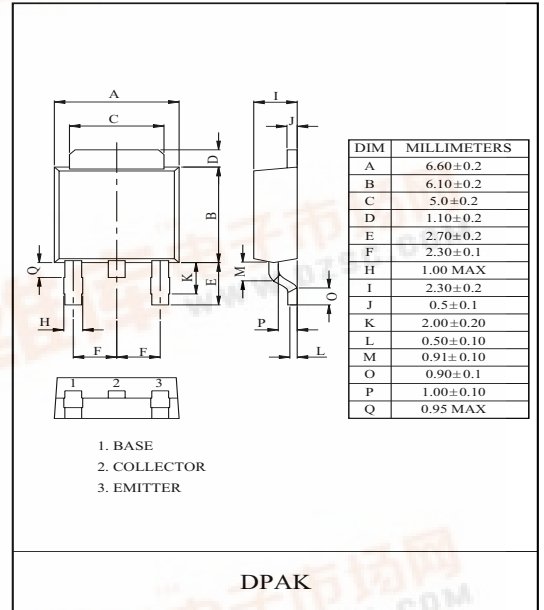
POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)}=0.5V(\text{Max.}) (I_C=1A)$
- High Speed Switching Time : $t_{stg}=1\mu S(\text{Typ.})$
- Complementary to KTA1718D/L.

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	2	A
Emitter Current	I_E	-2	A
Collector Power Dissipation	P_C	Ta=25°C	1.0
		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_{CB0}	$V_{CB}=50V, I_E=0$	-	-	0.1	μA	
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50	-	-	V	
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=2V, I_C=0.5A$	70	-	240		
	h_{FE2}	$V_{CE}=2V, I_C=1.5A$	40	-	-		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.05A$	-	-	0.5	V	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1A, I_B=0.05A$	-	-	1.2	V	
Transition Frequency	f_T	$V_{CE}=2V, I_C=0.5A$	-	100	-	MHz	
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	30	-	pF	
Switching Time	Turn On Time	t_{on}			-	0.1	-
	Storage Time	t_{stg}			-	1.0	-
	Fall Time	t_f			-	0.1	-

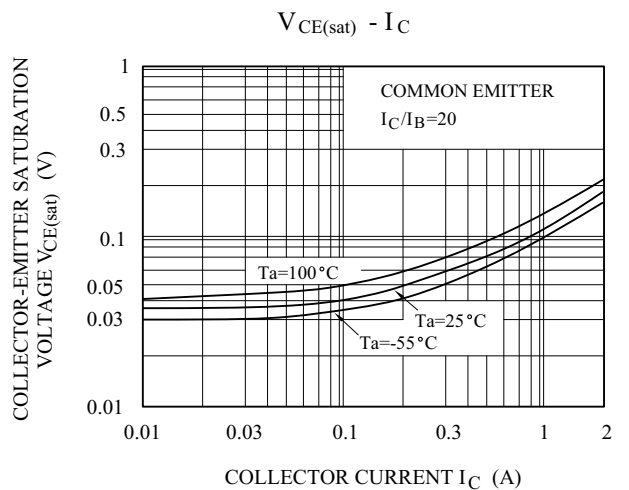
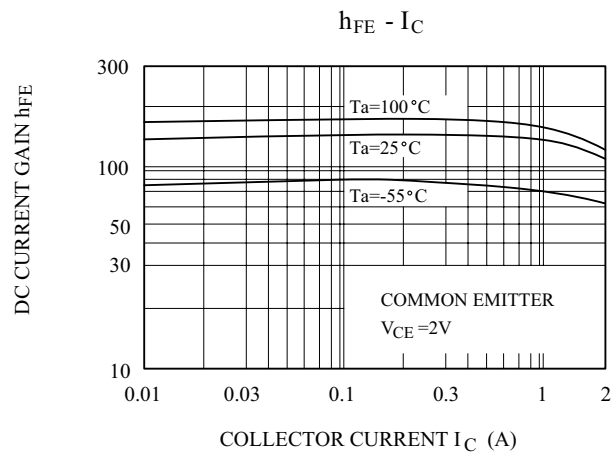
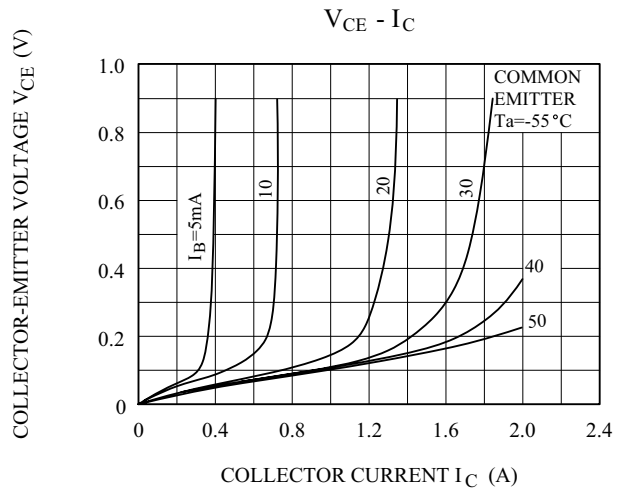
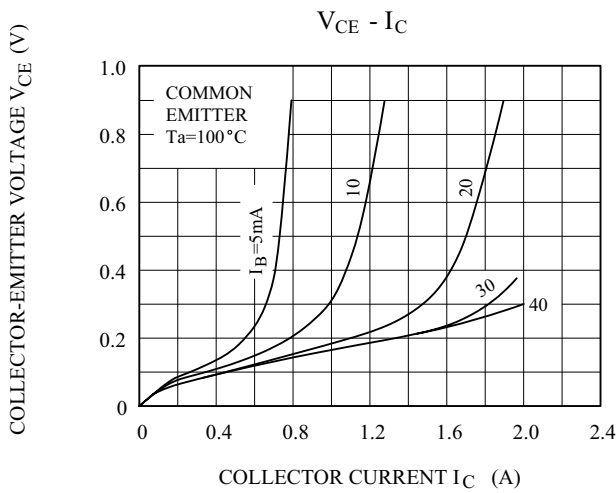
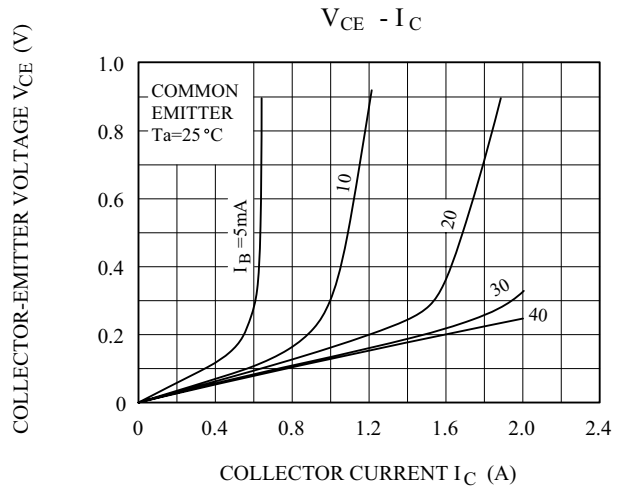
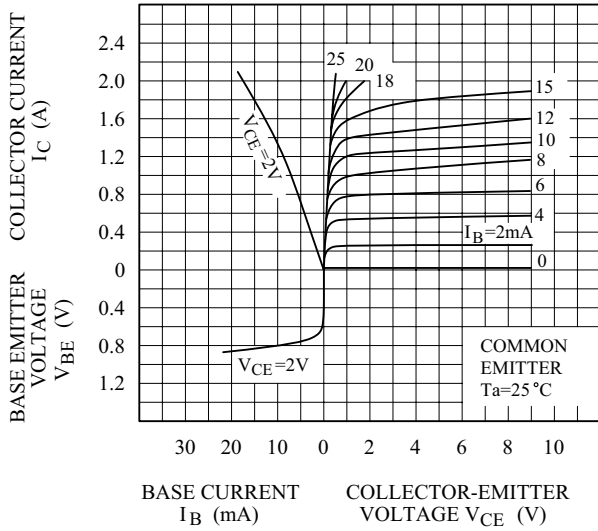
$I_{B1}=-I_{B2}=0.05A$
DUTY CYCLE $\leq 1\%$

$V_{CC}=30V$



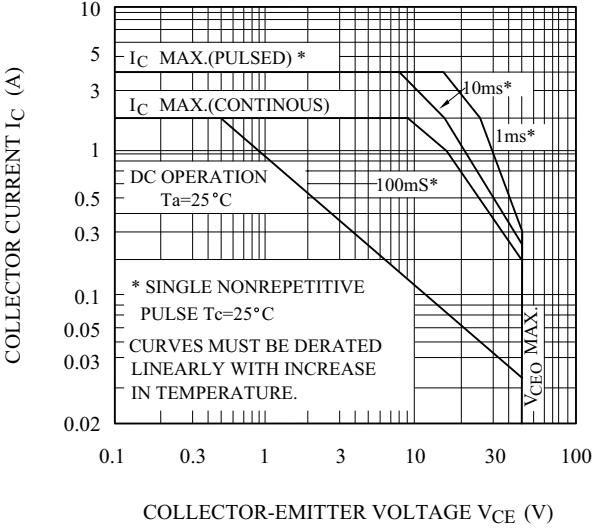
KTC2815D/L

STATIC CHARACTERISTICS



KTC2815D/L

SAFE OPERATING AREA



$P_c - T_a$

