

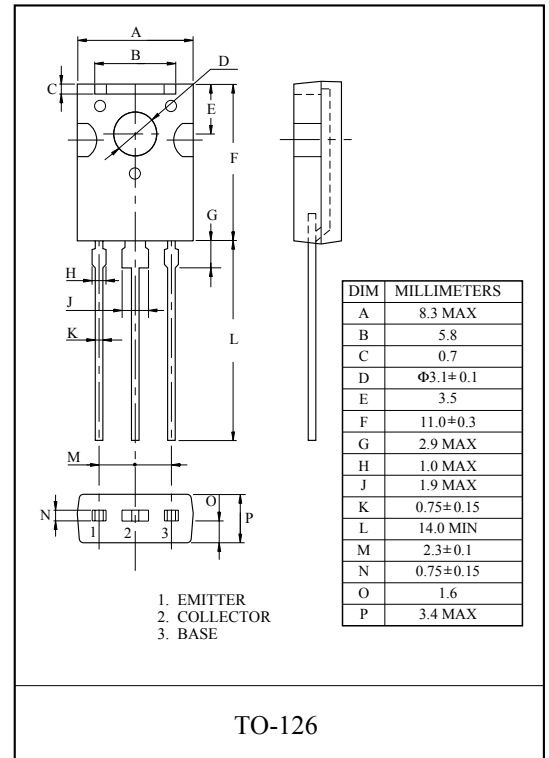
POWER AMPLIFIER APPLICATION.  
POWER SWITCHING APPLICATION.

### 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 KTC2814.

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-2	A
Collector Power Dissipation	$P_C$	Ta=25°C	1.5
		Tc=25°C	10
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C



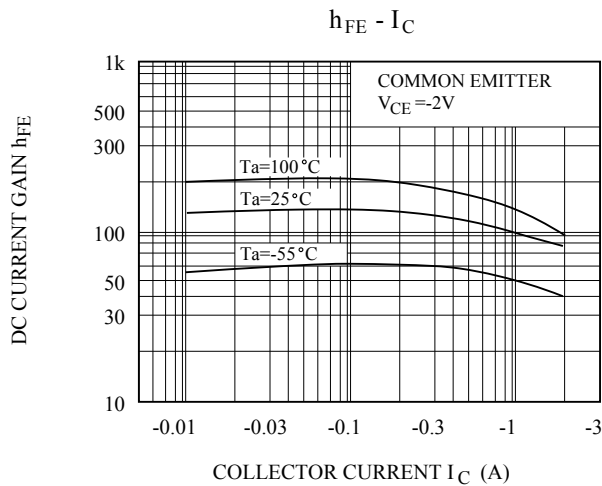
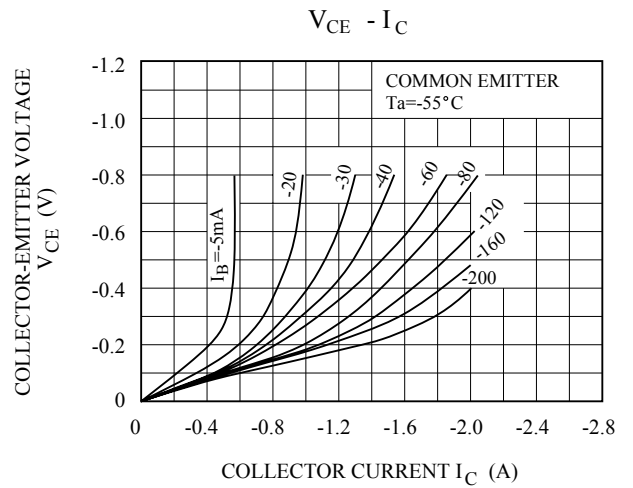
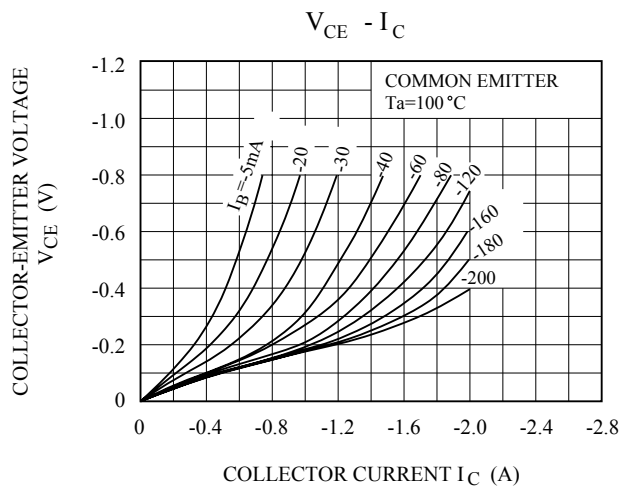
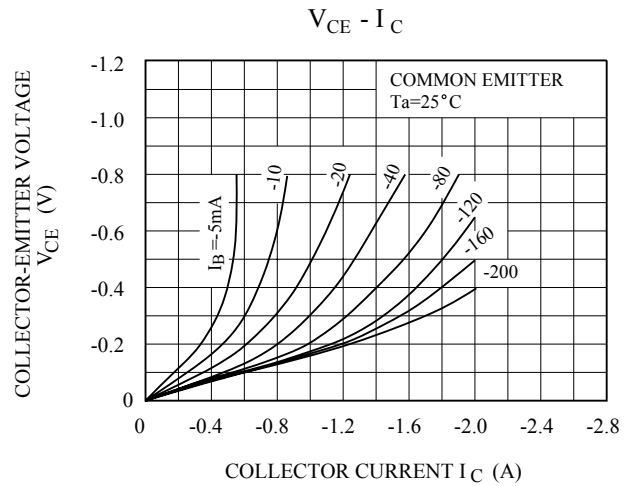
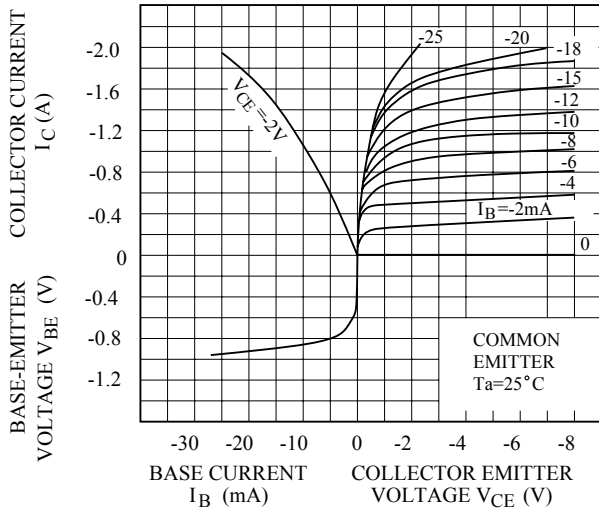
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -50V, I_E = 0$	-	-	-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	
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -1.5A$	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	-	μS
	Storage Time	$t_{stg}$	-	1.0	-	
	Fall Time	$t_f$	-	0.1	-	

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

Note :  $h_{FE(1)}$  Classification O:70 ~ 140, Y:120 ~ 240

## STATIC CHARACTERISTICS



# KTA1715

