

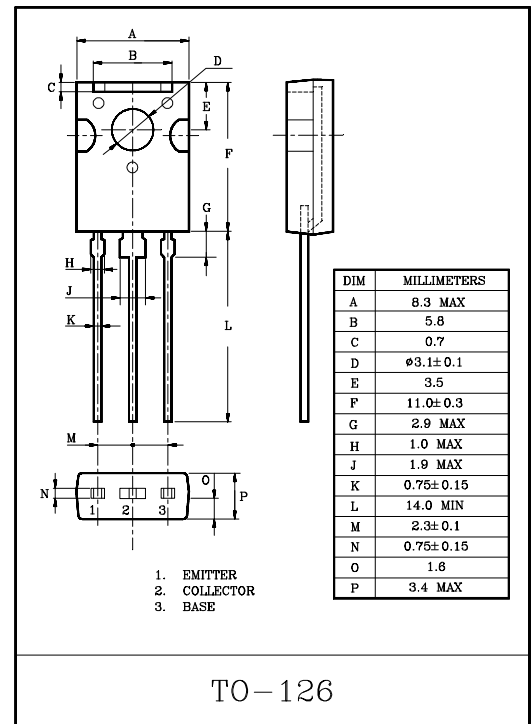
POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

- Low Collector Saturation Voltage
: $V_{CE(sat)}=0.5V(\text{Max.}) (I_C=1A)$
- High Speed Switching Time : $t_{stg}=1.0\mu S(\text{Typ.})$
- Complementary to KTA1715.

MAXIMUM RATINGS ($T_a=25^\circ C$)

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	
Emitter Current	I_E	-2	A	
Collector Power Dissipation	P_C	$T_a=25^\circ C$	1.5	W
		$T_c=25^\circ C$	10	
Junction Temperature	T_j	150	$^\circ C$	
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$	



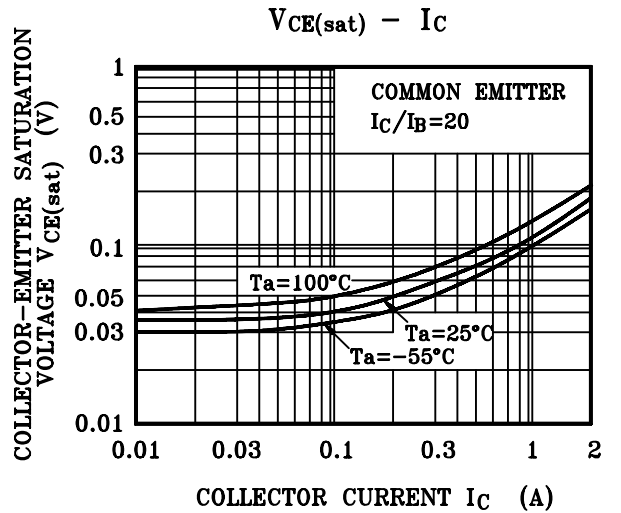
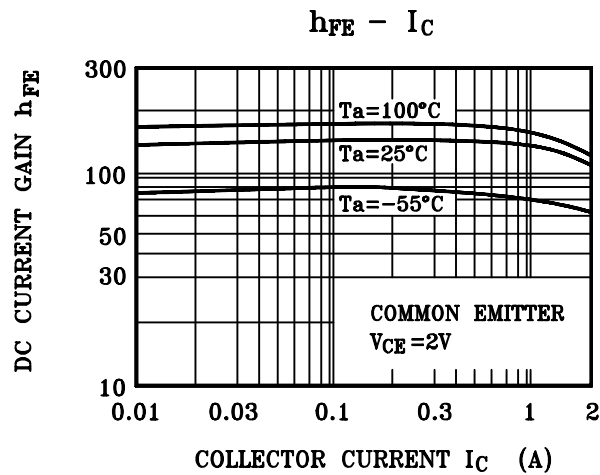
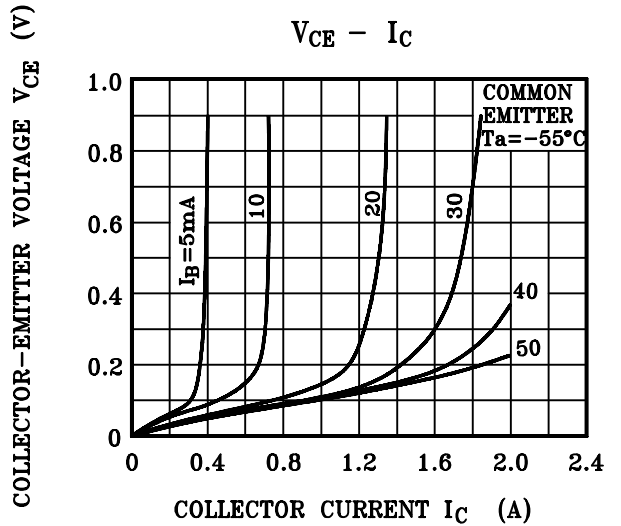
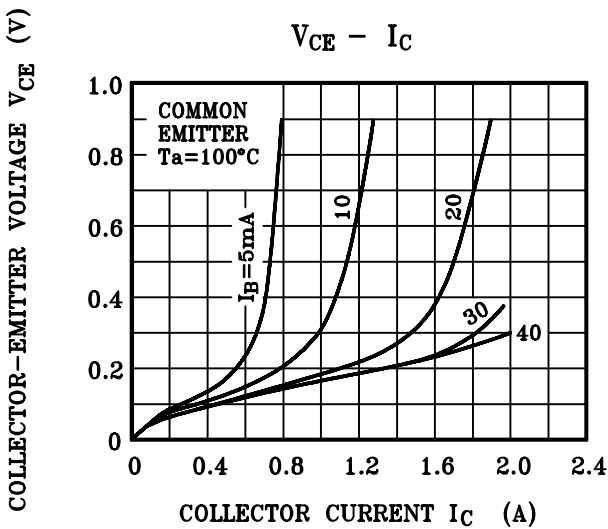
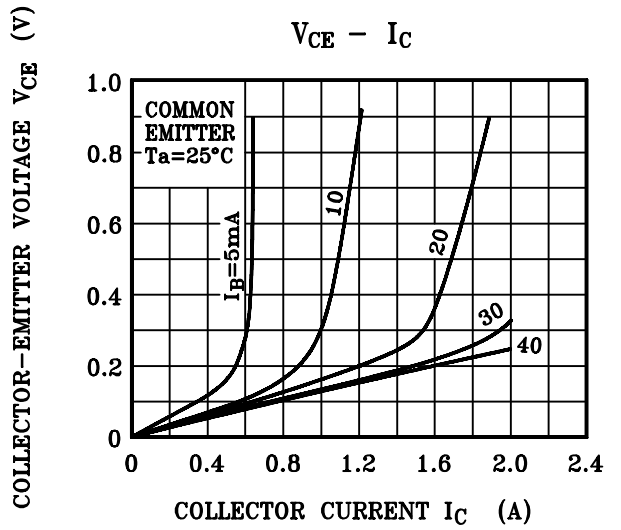
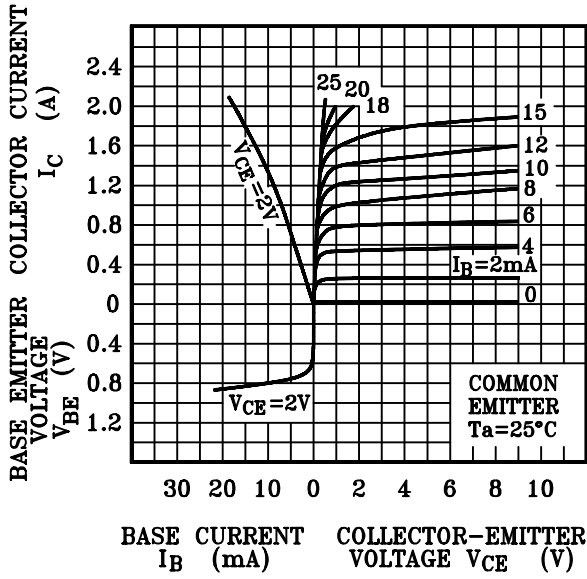
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

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 $\leq 1\%$

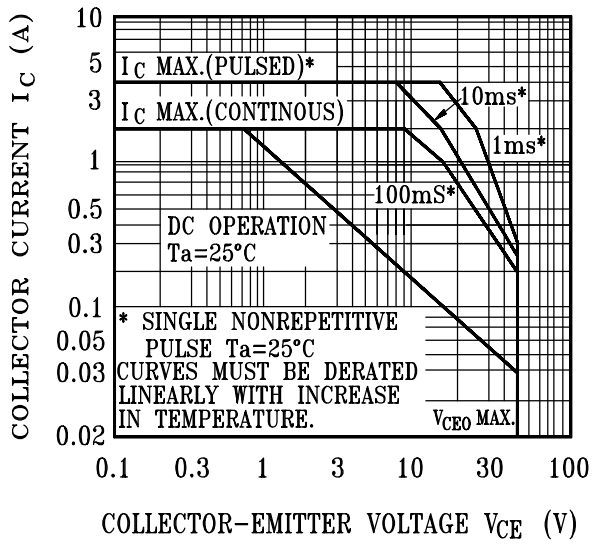
Note : h_{FE} Classification O:70~140, Y:120~240

STATIC CHARACTERISTICS



KTC2814

SAFE OPERATING AREA



$P_C - T_a$

