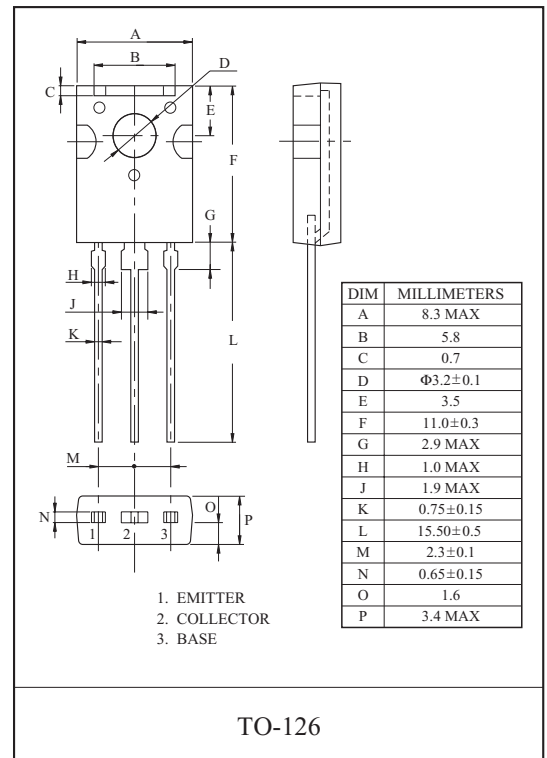


**POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.****FEATURES**

- 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.
- Suffix U : Qualified to AEC-Q101.
ex) KTC2814-Y-U/PU

MAXIMUM RATING (Ta=25)

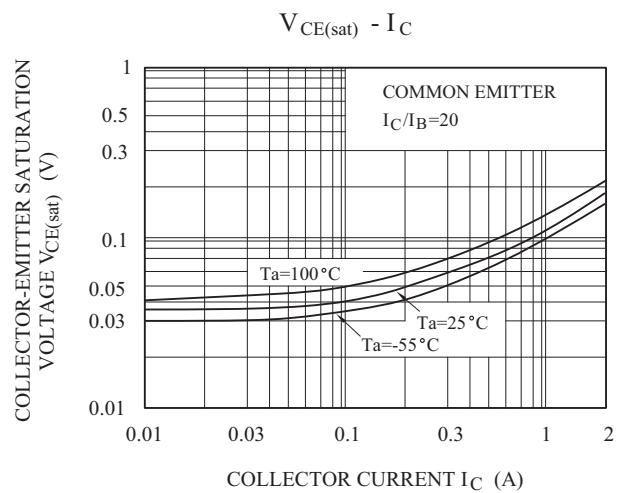
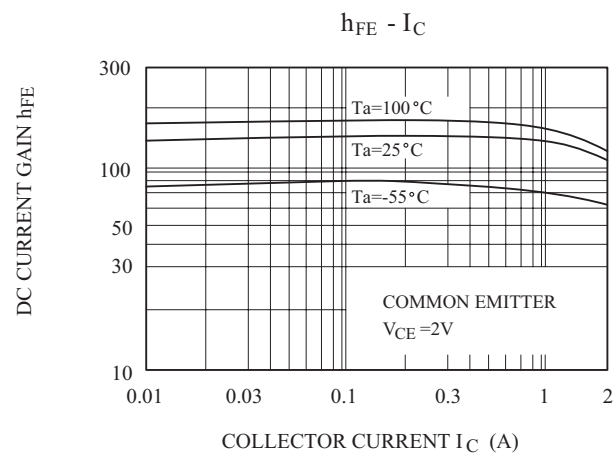
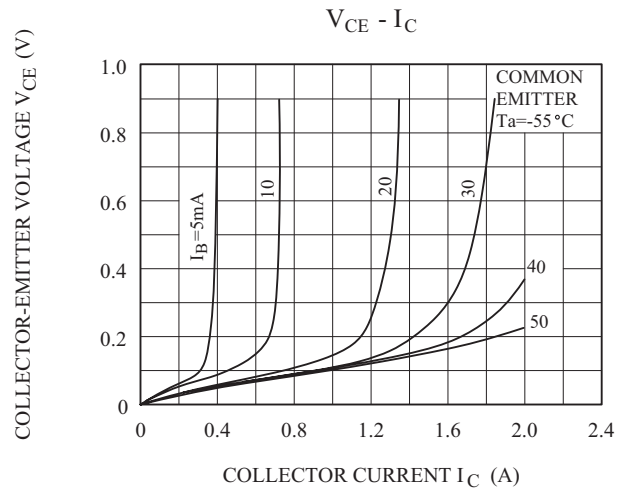
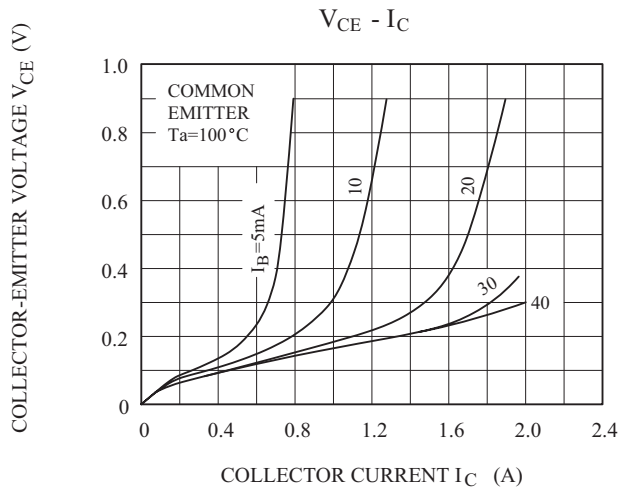
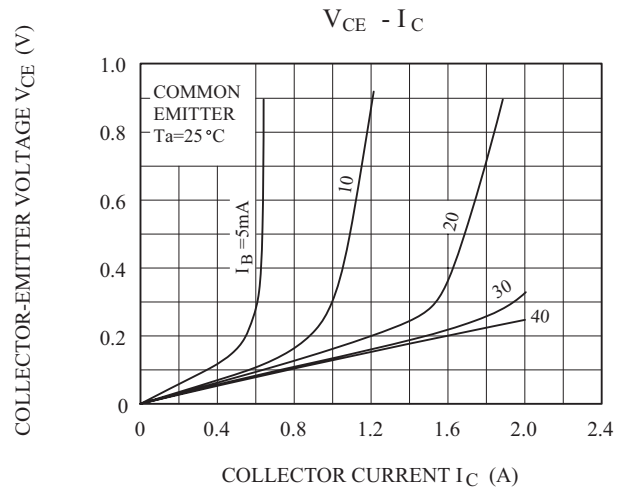
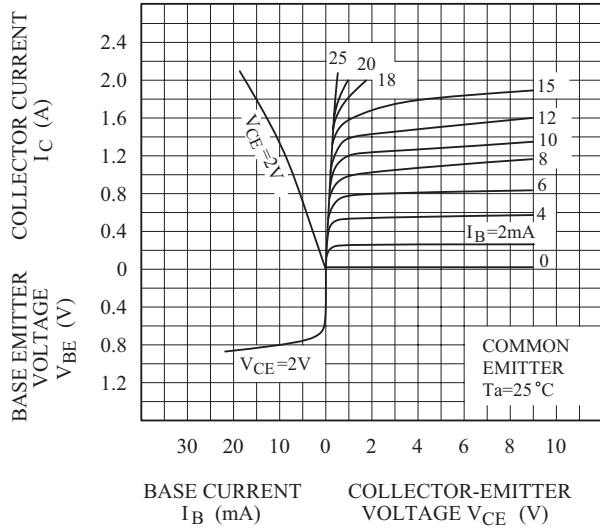
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	2	A
Emitter Current	I_E	-2	A
Collector Power Dissipation	Ta=25	P_C 1.5	W
	Tc=25	10	
Junction Temperature	T_j	150	
Storage Temperature Range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

**ELECTRICAL CHARACTERISTICS (Ta=25)**

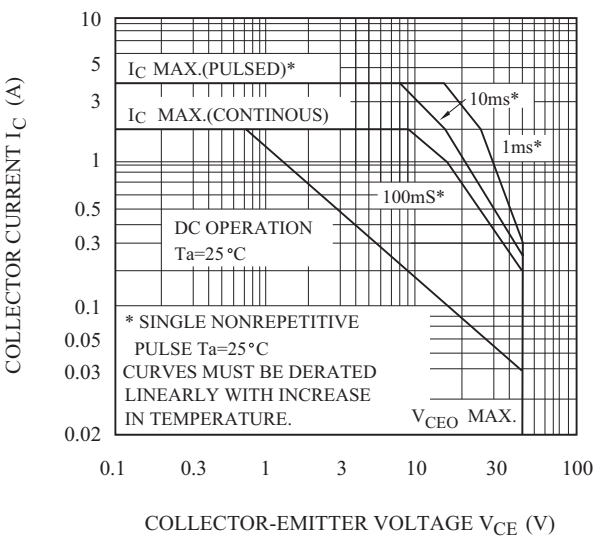
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=50V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=2V, I_C=0.5A$	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	-	

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

STATIC CHARACTERISTICS



SAFE OPERATING AREA



Pc - Ta

