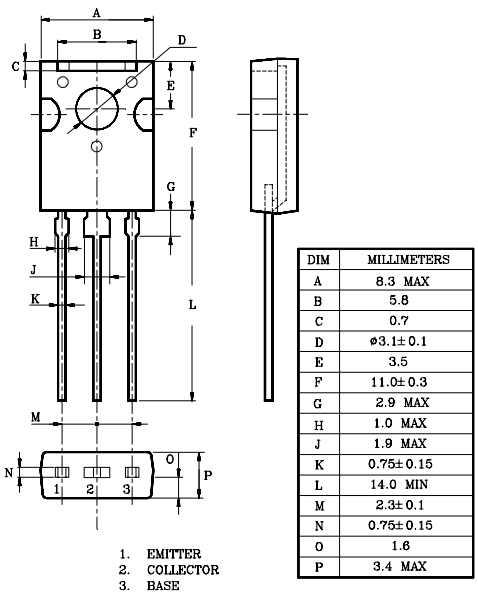
KTA1715

EPITAXIAL PLANAR PNP TRANSISTOR

POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

- Low Collector Saturation Voltage
  : $V_{CE(sat)}$=-0.5V(Max.) (I_C=-1A)
- High Speed Switching Time : t_{stg}=1μS(Typ.)
- Complementary to KTC2814.



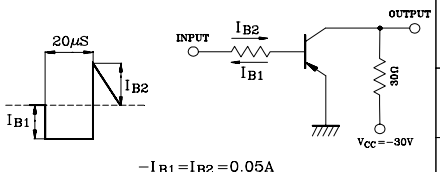
DIM	MILLIMETERS
A	8.3 MAX
B	5.8
C	0.7
D	ø3.1± 0.1
E	3.5
F	11.0± 0.3
G	2.9 MAX
H	1.0 MAX
J	1.9 MAX
K	0.75± 0.15
L	14.0 MIN
M	2.3± 0.1
N	0.75± 0.15
O	1.6
P	3.4 MAX

TO-126

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
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	℃

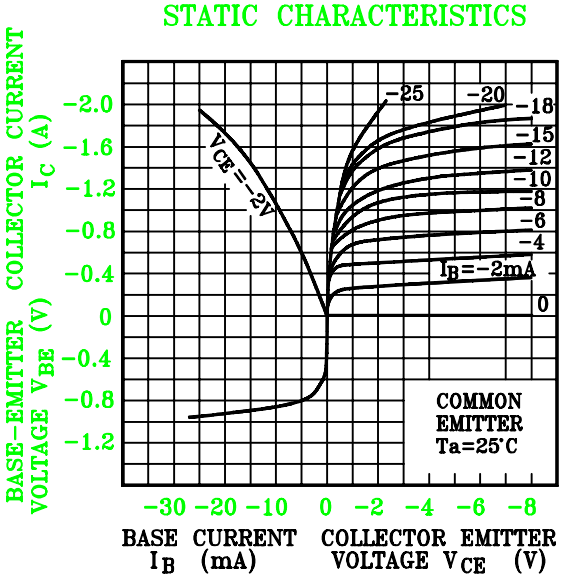
ELECTRICAL CHARACTERISTICS (Ta=25℃)

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	-	

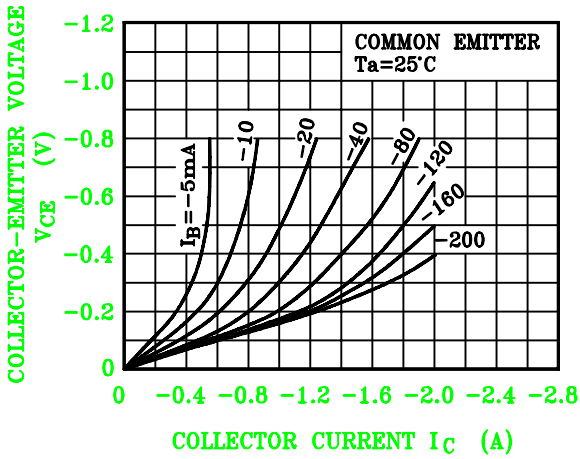
$-I_{B1}=I_{B2}=0.05A$
DUTY CYCLE ≤ 1%

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

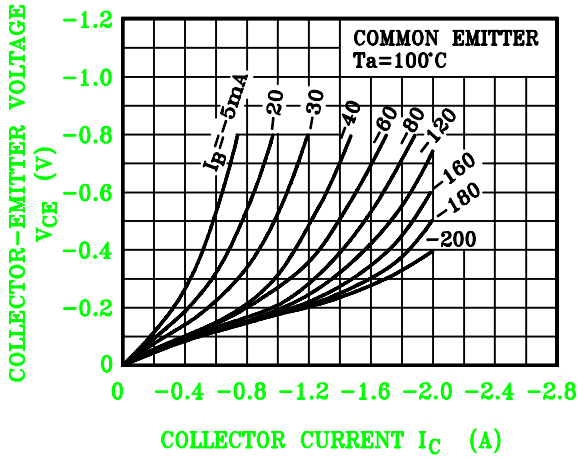
STATIC CHARACTERISTICS



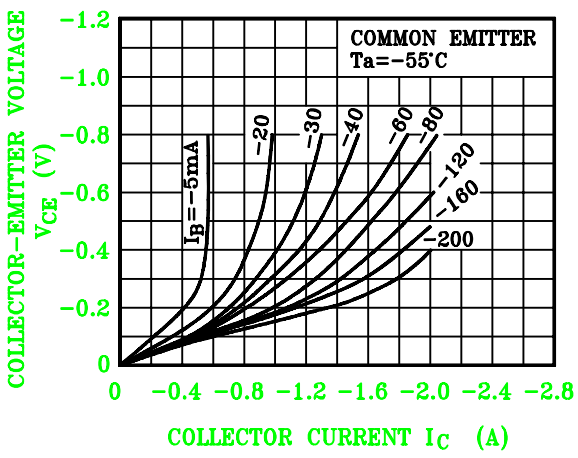
V_{CE} - I_C



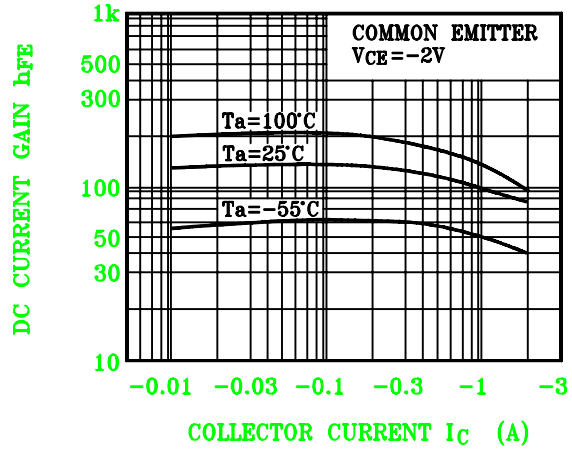
V_{CE} - I_C



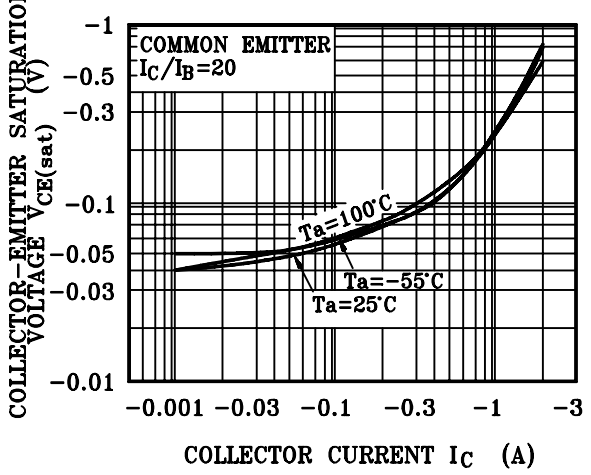
V_{CE} - I_C



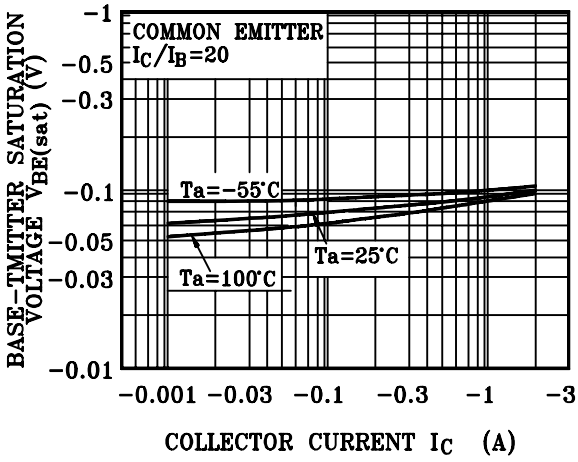
h_{FE} - I_C



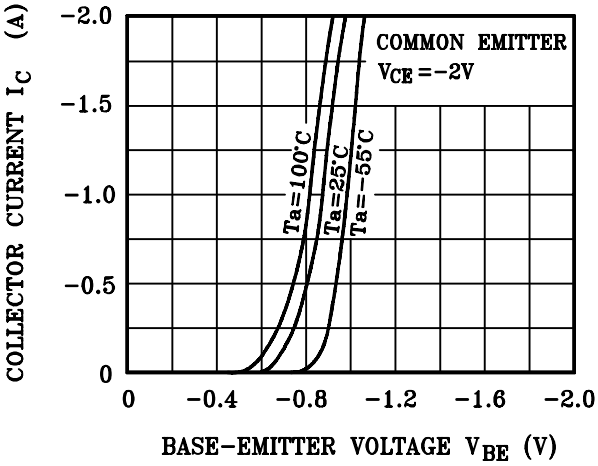
$V_{CE(sat)}$ – I_C



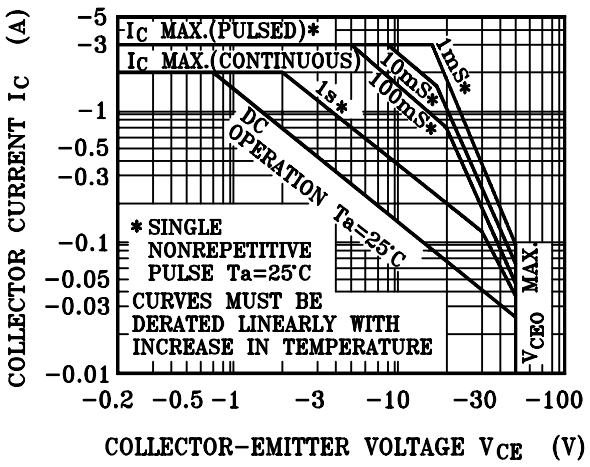
$V_{BE(sat)}$ – I_C



I_C – V_{BE}



SAFE OPERATING AREA



P_C – Ta