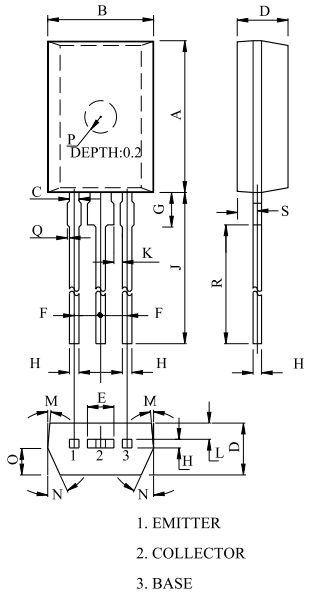
KTC3209

EPITAXIAL PLANAR NPN TRANSISTOR

POWER AMPLIFIER APPLICATIONS.
POWER SWITCHING APPLICATIONS.

FEATURES

- Low Collector Saturation Voltage
  : $V_{CE(sat)}$=0.5V(Max.) (I_C=1A)
- High Speed Switching Time : t_{stg}=1.0μS(Typ.)
- Complementary to KTA1281.



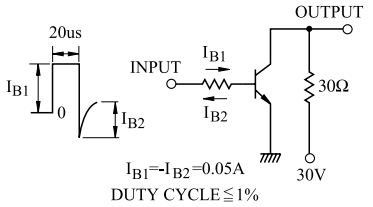
DIM	MILLIMETERS
A	7.20 MAX
B	5.20 MAX
C	0.60 MAX
D	2.50 MAX
E	1.15 MAX
F	1.27
G	1.70 MAX
H	0.55 MAX
J	14.00±0.50
K	0.35 MIN
L	0.75±0.10
M	4°
N	25°
O	1.25
P	Φ1.50
Q	0.10 MAX
R	12.50±0.50
S	1.00

TO-92L

MAXIMUM RATING (Ta=25℃)

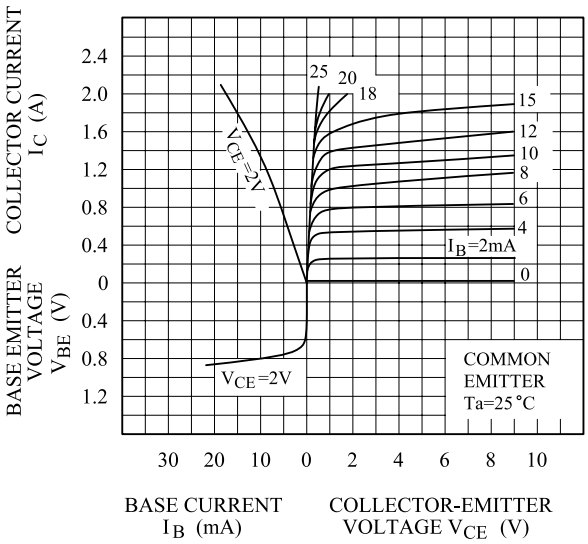
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	2	A
Emitter Current	I_E	-2	A
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

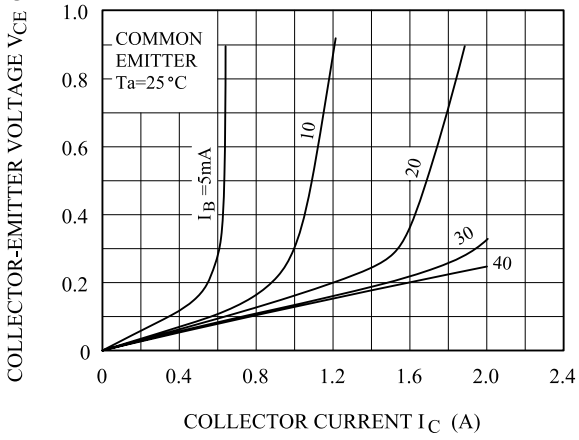
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=50V, I_E=0	-	-	0.1	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=5V, I_C=0	-	-	0.1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=10mA, I_B=0	50	-	-	V
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	I_E=100mA, I_B=0	5	-	-	V
DC Current Gain		h_{FE} (1) (Note)	V_{CE}=2V, I_C=0.5A (Note)	70	-	240	
		h_{FE} (2) (Note)	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 0:70～140, Y:120～240

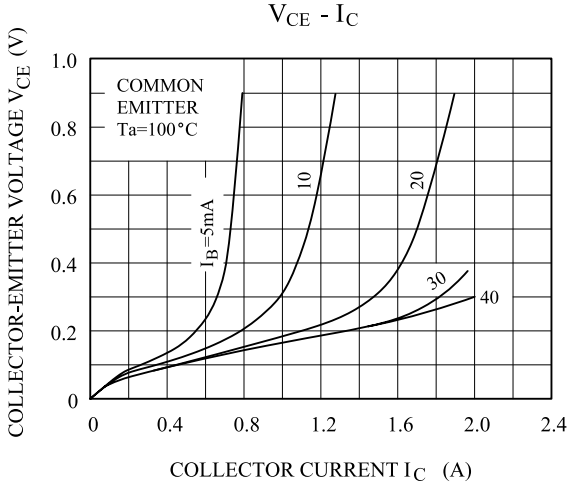
STATIC CHARACTERISTICS



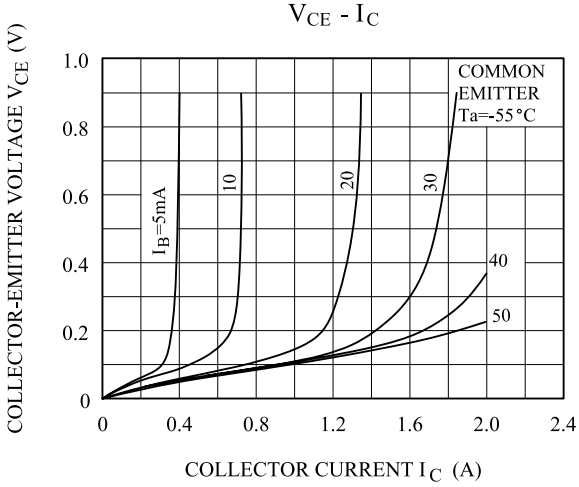
V_{CE} - I_C



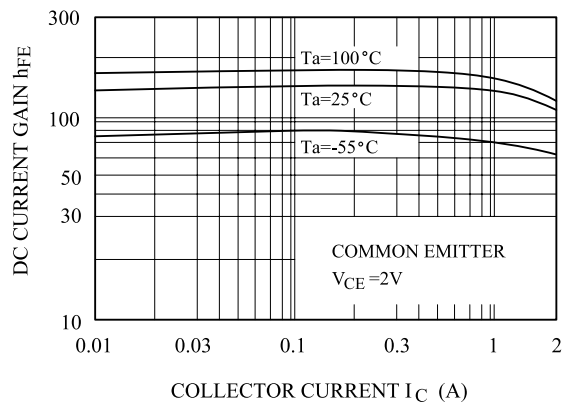
V_{CE} - I_C



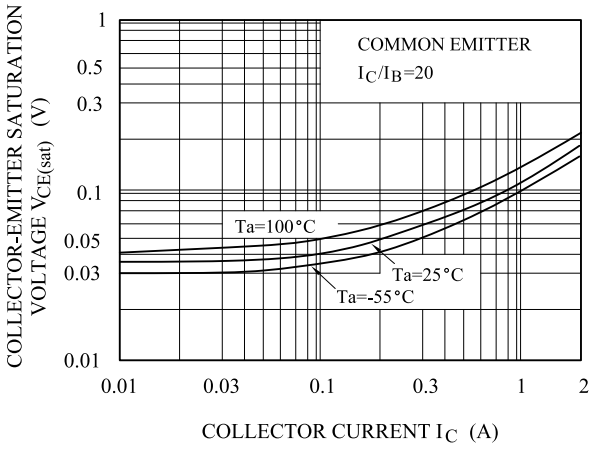
V_{CE} - I_C



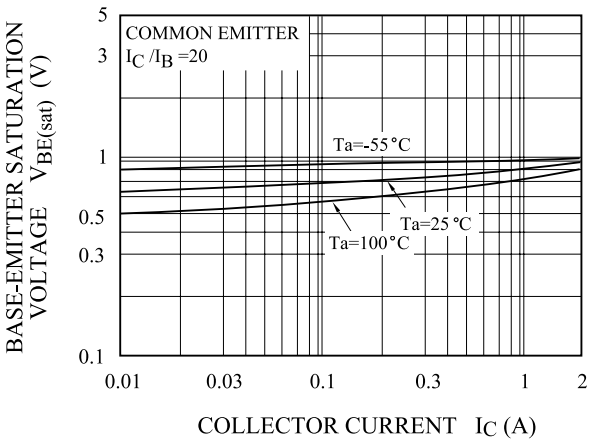
h_{FE} - I_C



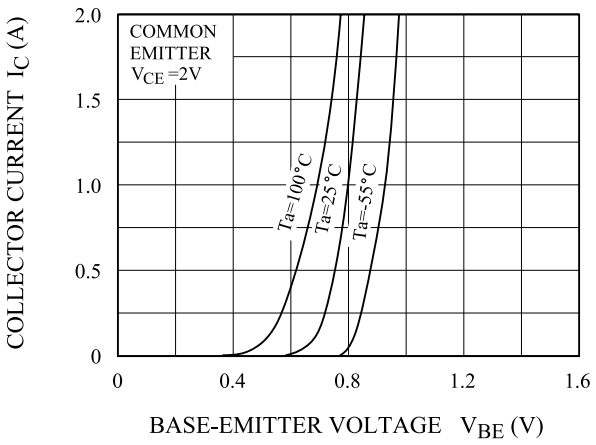
$V_{CE(sat)}$ - I_C



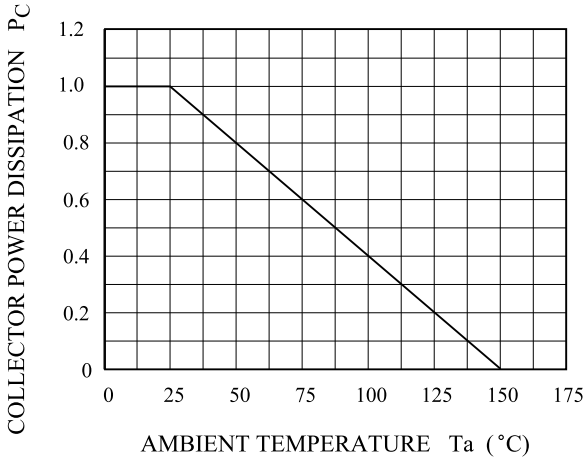
$V_{BE(sat)}$ - I_C



I_C - V_{BE}



Pc - Ta



SAFE OPERATING AREA